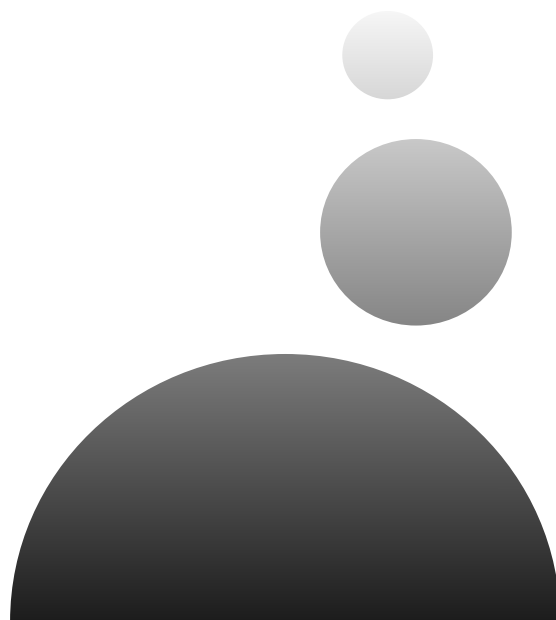


Design Your Style



Linux Based Web Portal Solution

Technical Guide



Introducing Segio

Segio was developed as a successor to COBEE Web Solution Version 2.5. By releasing the revised 6th edition of COBEE Web Solution after Version 1.0 had been released, many parts were improved. However, it did not deviate from the basic design of Version 1.0 and there were many difficulties satisfying the demand for technical changes. Segio was developed based on a new design for remarkable improvement in safety, extensibility and convenience of the engine.

The engine is structured as a main engine and a sub-engine to secure safety basis. The fundamental problem of the entire system being unstable, due to the errors in some modules of the old integrated engine, has been solved. The Authorization center provides an authorization service for entire IntraCells simultaneously, and the message center provides a chat room service for all IntraCells. This allows both the maintenance of login function and the ability of chat rooms to re-initiate.

For the web interface, previous filtering functions perform better and are improved drastically. The newly introduced concept of HTML Shell allows convenient maintenance and management of HTML documents, and DHTML Editor is brought in for both Web mail and bulletin board so now it is possible to edit the contents including multimedia. The Web filtering function, one kind of script and additionally supplemented itself, allows dynamic configuration of the web service and effective configuration of multimedia data posted on a bulletin board.

This manual focuses on technical explanations. There may be some difficulties for the first time user of Segio to understand this manual and make practical use of it. Even after the release of Segio, related information on patched versions with upgraded functions will be available from the webpage. For detailed information, please refer to the Segio website.

Glossary

1. User : User who has provided personal detail and registered at IntraCell, ID and Password given.
2. Logger : User logged in and given level and authority.
3. Guest : Virtual user allowed to login.
4. Member : User registered in Member management system including group or personal area.
5. IntraCell : Basic unit providing entire function of Segio.
6. Intranet : Basic structuring material of IntraCell, Web service used after user authentication.
7. Homepage : Web service provided on basis of HTTP protocol's URL.
8. Closed User Group (Group) : Small sized community operated with common purpose by multiple users.
9. Segio Administrator : Administrator appointed as an address format in Segio configuration file. Email address is made by combining representative domain address of belonged IntraCell and user ID in IntraCell. Segio Administrator is responsible for operating Segio system.
10. IntraCell Administrator : Level 9 user, who is registered in IntraCell, User registered as the owner also is given Level 9.
11. Group Administrator : Level 9 user of the group, user appointed as the owner has the authority of Level 9.
12. System Administrator : Super user of Linux/Unix; root.
13. System User : User registered in Linux/Unix.
14. Attached file : Data file not displayed in the contents of the posting.
15. Inline file : Data file displaying a small part of the total contents of bulletin board. (If an image file is linked to HTML contents, the image file becomes the inline file)
16. Web filtering (Html Filtration) : Script applied to HTML document. Implement technique of dynamic HTML.
17. Shell document (Html Shell) : Document to wrap HTML document, a shell document.

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Chapter 1 Installation

Segio is Linux/Unix based web demon and description of this manual is based on system Linux kernel 2.6 or higher. To operate Segio, basic package and IntraCell must be installed. All data files for trial version can be downloaded from below site.

<http://file.segio.com/>

1.1 Basic package

If you download the RPM Installation file, then you can complete till the section 2 of chapter 1 by executing the “/etc/shttpd/bin/configure”. Section 1 and 2 explain the direct installation after downloading the compressed file. For the installation procedures given in this manual, you must login first to the System Administrator (root) account and all Segio related data installed is to modify under System users' ownership. In this manual, “segio” is assumed as the assigned system user. In Redhat allied Linux system, minimized the installation procedure by downloading the rpm file.

A. Decompressing basic package

Login as system user then register the account of system user.

`[root@sm t]# adduser segio ↵`☞ System user registration

Decompress the basic package as below and move to "/etc/shttpd/".

`[root@sm t]# tar xf shttpd.*.tar ↵`☞ Decompressing package file
`[root@sm t]# mv shttpd /etc/ ↵`☞ Moving execution binary directory
`[root@sm t]# chown -R segio:segio /etc/shttpd ↵`☞ Ownership change of System User

Once the basic package is installed, subdirectory has structure as below.

/etc/shttpd/	bin/	☞ Primary execution files
	tmp/	☞ Temporary job files
	cgi-bin/	☞ Additional web application apart from the engine
	data/	☞ Applied template, IntraCell model data
	logs/	☞ Log analysis data location
	conf/	☞ Configuration file, Language selection files, etc
	icons/	☞ Shared IntraCell icons directory

Each directory has execution binary and setup files and participates directly to the operation of Segio, therefore, it is prohibited to erase at one's discretion.

B. Configuration

"/etc/shttpd/conf/" directory has following kinds of configuration files located.

shttpd.conf	☞ Basic configuration of webdemon
hosts.conf	☞ IntraCell, virtual hosting configuration
mimetype.conf	☞ MIME configuration depending on file extension
spamword.dat	☞ Spam mail filtering data
fileicon.conf	☞ Icon display configuration depending on file extension
m_virtuser.conf	☞ Additional virtual users on Web mail * Refer to the explanation on Web mail
m_localhost.conf	☞ Additional local host for web mail * Refer to the explanation on Web mail
word-kr.conf	☞ korean language file
word-jp.conf	☞ Japanese language file
word-cn.conf	☞ Chinese language file
word-en.conf	☞ English language file
(Word setting files have the changed structure component in some cases.)	

Executing the “configure” in “/etc/shttpd/bin/” directory, install the first intracell with configuration setup.

Segio Web Daemon Configuration (shttpd.conf)

Since "shttpd.conf" file manages important environmental variables, it is decided not to be managed by web management tool. Configuration can be done using editors such as vi, and do as below.

NAME	"Segio Homepage"
IPADDRESS	"192.168.1.1"
USER	"segio"
GROUP	"segio"
ADMIN	"summer@sm.kseek.com wind@sm.kseek.com"
HTTPPORT	"80"
FLAG_MAIL	"ON"

For configuration, following reserved words are used.

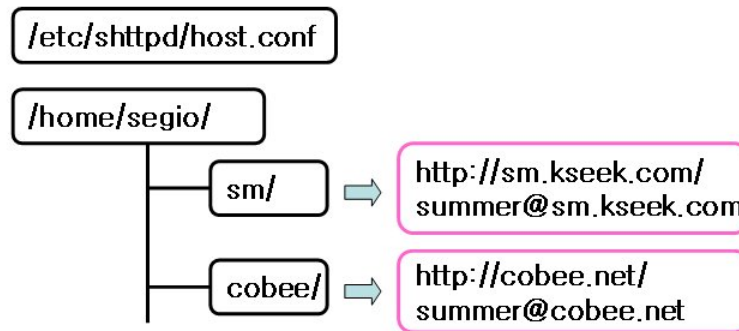
Reserved word	Details	Configuration example
NAME	System name	SegioNet
IPADDRESS	IP address	168.1.1.24
MAILHOST	Mail Host (IP address)	127.0.0.1
USER	System user account	Segio
GROUP	System user group account	Segio
HTTPPORT	Port used by Official Web Server	80
ADMIN	Appointment of Segio Administrator	summer@sm.kseek.com
FLAG_MAIL	WebMail support option (Password patch)	ON/OFF

"ADMIN" is able to appoint number of users and interpreted as followed; Segio Administrator has powerful authorities for the installation of intracell, configuration, managing shared web resources, etc.

```
ADMIN "summer@sm.kseek.com wind@test.kseek.com"
      User 'summer' of IntraCell appointed by sm.kseek.com domain, and
      User 'wind' of IntraCell appointed by test.kseek.com domain become the Segio Administrator.
```

Host configuration (hosts.conf)

Web service is provided in URL address format which includes the host address. All service unit of Segio such as IntraCell, virtual homepage and others are configured. The diagram below shows that there are two IntraCells installed for a server.



Each IntraCell is the basic unit supporting the all web services of segio under certain directory. One server can install multiple IntraCells and IntraCells to be installed are limited depending on the Right of Use license. In Each Intracell, multiple users can apply it and operate it as the shared intranet. Below is the example configuration of hosts.conf.

```
CELL 00
  Intranet ":sm.kseek.com" "/home/segio/sm/"
  Diskquota      40960
  MaxUser        200
  MaxLogin       30
  MaxMailUser    30
  MaxGroup       15
  MaxBoard       27
  Owner          "sysop"
  Virthome       "sss.kseekcom" "sss/"
```

Virthome	":ddd.kseek.com" "ddd/"
CELL 01	
Intranet	":test.kseek.com" "/home/segio/test/"
Diskquota	1096
MaxUser	5
MaxLogin	5
MaxGroup	5
MaxBoard	7
MaxMailUser	5
Owner	"colt357"
Virthome	":home1.kseek.com" "home1"

Following is summary about the reserved word and assignment category related to the intracell setup

Reserved word	Assignment category 1	Assignment category 2	Detail
CELL	Cell number		Appoint number between 0 ~ 999
Intranet	Host name	primary directory	"Host 1" is used for combining email addresses
Disk Quota	Disk allocation		Enter the number in unit of Mbyte
MaxUser	Limitation of user registration		Maximum number of registered user
MAXlogin	Limitation of simultaneous access		Maximum number of simultaneous access
MaxGroup	Limitation of CUG installation		Maximum number of CUG installation
MaxBoard	Limitation of Board installation		Maximum number of Board installation (Including CUG and private community)
MaxMailUser	Limitation of webmail user		Maximum number of Webmail User
Owner	UID		User ID of the Owner
Virthome	Host name	Relative directory	Registration of additional virtual homepages

IntraCell assigns the number between 0 and the number of IntraCells with secured Right of use. Primary directory assigned as "Intranet" represents the directory path of the system and relative directory assigned as "Virthome" means that web service is provided from lower path "html/" of IntraCell. Above configuration set up easily by using the management tool provided to segio manager. But, in case of manual installation, directly edit it as above for first intracell.

C. Procmail Installation

Procmail is the program which saves electronic mails to user's mail box and included as a compressed file in release version. Login into root account is required for installation and need gcc compiler.

[root@sm t]# ls ↵ procmail.tar [root@sm t]# tar xf procmail.tar ↵ [root@sm t]# cd procmail ↵ [root@sm procmail]# make ↵

When compiling is finished, complete the installation by executing following command.

```
make install-suid ↵
```

Intacell make the user use the virtual mail accounts. For using the virtual mail accounts, change the next configuration of sendmail(/etc/mail/sendmail.cf).

```
# operators that cannot be in local usernames (i.e., network indicators)
CO @ % !
```

As follow, make option invalid.

```
# operators that cannot be in local usernames (i.e., network indicators)
#CO @ % !
```

You must execute again the sendmail or reboot the system.

D. Database Installation

Some execution files of Segio are closely linked with PostgreSQL and must be installed. PHP supports PostgreSQL and MySQL and it is recommended to install MySQL to use the database in PHP. Right to use of the software must be obtained separately to use MySQL.

Database	Detail
MySQL	- Version : over 4.1(under 4.1, can't support UTF-8) - Library Position : /usr/lib - O/S : over RedHat 9.0
PostgreSQL	- Version : over 7.3 - Library Position : /usr/lib - O/S : over RedHat 9.0

Recently, a variety of S/W coupled with MySQL are used abroad, but license policy was changed. So you must make certain the using license. Above Databases must support the UTF-8 character set.

PostgreSQL

If installed version is lower version than 7.x, Version 7.x must be installed. Version check for installed PostgreSQL can be done in following method.

```
[root@gw root]# psql --version ↵
psql (PostgreSQL) 7.3.4
```

If installed PostgreSQL version 7.x, omitted the PostgreSQL installation. In opposition case, you must 7.x version. Refer to the Linux version and download the appropriate RPM Package from the address below.

<http://www.postgresql.org/ftp/binary/>

Install RPM Package as follows.

postgresql-server-7.3.4-1PGDG.i386.rpm	Server Package
postgresql-7.3.4-1PGDG.i386.rpm	Client Package
postgresql-devel-7.3.4-1PGDG.i386.rpm	DB coupled Development Library
postgresql-docs-7.3.4-1PGDG.i386.rpm	Help Document Package
postgresql-libs-7.3.4-1PGDG.i386.rpm	Postgresql execution Library

Install downloaded RPM Package in following order.

```
[root@sm t]# ls
postgresql-7.3.4-1PGDG.i386.rpm      postgresql-devel-7.3.4-1PGDG.i386.rpm
postgresql-docs-7.3.4-1PGDG.i386.rpm postgresql-libs-7.3.4-1PGDG.i386.rpm
postgresql-server-7.3.4-1PGDG.i386.rpm

[root@sm t]# rpm -ivh postgresql-7.3.4-1PGDG.i386.rpm
[root@sm t]# rpm -ivh postgresql-devel-7.3.4-1PGDG.i386.rpm
[root@sm t]# rpm -ivh postgresql-docs-7.3.4-1PGDG.i386.rpm
[root@sm t]# rpm -ivh postgresql-libs-7.3.4-1PGDG.i386.rpm
[root@sm t]# rpm -ivh postgresql-server-7.3.4-1PGDG.i386.rpm
```

Installation can be checked by doing below.

```
[root@sm t]# rpm -qa | grep postgres
postgresql-jdbc-7.3.2-3
postgresql-contrib-7.3.2-3
postgresql-test-7.3.2-3
postgresql-python-7.3.2-3
gnucash-backend-postgres-1.8.1-3
postgresql-odbc-7.2.5-1
postgresql-server-7.3.2-3
postgresql-libs-7.3.2-3
postgresql-devel-7.3.2-3
postgresql72-libs-1-3
postgresql-tcl-7.3.2-3
postgresql-docs-7.3.2-3
postgresql-7.3.2-3
postgresql-pl-7.3.2-3
```

MySQL

MySQL must be Version 4.1 or higher. Check the version of installed MySQL as follows.

```
[root@sm t]# mysql --version
mysql Ver 14.7 Distrib 4.1.7, for pc-linux (i686)
```

Command to check the version installed

Using the web browser, download MySQL RPM Package from the following address.

URL: <http://dev.mysql.com/downloads/mysql/4.1.html>

For smooth operation, install the following RPM Package.

MySQL-server-4.1.7-0.i386.rpm	Sever software
MySQL-client-4.1.7-0.i386.rpm	Client software
MySQL-devel-4.1.7-0.i386.rpm	MySQL Library

Install downloaded RPM Package in following order (Erase existing MySQL).

```
[root@sm t]# ls ↵
MySQL-client-4.1.7-0.i386.rpm  MySQL-server-4.1.7-0.i386.rpm
MySQL-devel-4.1.7-0.i386.rpm  MySQL-shared-4.1.7-0.i386.rpm
[root@sm t]#
[root@sm t]# rpm -ivh MySQL-server-4.1.7-0.i386.rpm ↵
[root@sm t]# rpm -ivh MySQL-client-4.1.7-0.i386.rpm ↵
[root@sm t]# rpm -ivh MySQL-devel-4.1.7-0.i386.rpm ↵
```

Installation can be checked by doing below.

```
[root@sm t]# rpm -qa | grep MySQL
MySQL-devel-4.1.7-0
MySQL-python-0.9.1-6
qt-MySQL-3.1.1-6
MySQL-shared-4.1.7-0
MySQL-client-4.1.7-0
perl-DBD-MySQL-2.1021-3
MySQL-server-4.1.7-0
```

1.2 IntraCell Installation

IntraCell is a basic unit to provide intranet and homepage service. Administrator with good knowledge of IntraCell structure is able to install directly, however, this is accompanied by troublesome processes. Therefore, it is recommended to install easily and edit depending on the uses by utilizing existing intranet archives.

If you execute “/etc/shttpd/bin/configure”, install easily it with configuration. After installation of the first intracell, it is able to install the intracell using by web management tool.

A. Direct installation using shell commands

Create an IntraCell directory and unzip the “*.tar” format file selected among model files in “/etc/shttpd/data/source/”. By doing the below, it shows the shell directory name assigned to number 0.

Intranet ".sm.kseek.com:sm" "/home/segio/sm/"

Create a directory in following order and unzip the IntraCell model file.

```
[root@sm home]# cd /home/segio ↵
[root@sm segio]# mkdir sm ↵
[root@sm segio]# cd sm ↵
[root@sm sm]# ls /etc/shttpd/data/source ↵
e-school.tar    h-school.tar    m-school.tar    english.tar    japan.tar    korea.tar
[root@sm sm]# tar xf /etc/shttpd/data/source/e-school.tar ↵
```

Change the ownership of all directories and files included in lower path of IntraCell.

```
[root@sm sm]# chown -R segio:segio . * ↵
```

IntraCell Administrator

If an Administrator is registered in IntraCell model initially, enter the user ID and password to login. Follow steps below to register as a new user and login as IntraCell Administrator.

1. Write an ID you desire on ‘owner’ space of /etc/shttpd/conf/hosts.conf file.
2. Register by new user registration procedure of applicable IntraCell.
3. Enter the user ID and password to login, then Administrator authority will be given automatically.

In IntraCell distributed initially, enter the user ID "sysop" and password ("segio") to login as Class 9 Administrator. Please change the password as soon as you login or change IntraCell Administrator to another user since there may be security problems regarding this matter. In case of editing new IntraCell user, you must let the user to login as "sysop" or give guiding procedure some other way.

B. IntraCell directory

IntraCell appointed in "hosts.conf" has fixed format as below.

/home/segio/sm/	etc/	1.28 Intranet configuration and other files are located
	home/	1.28 User directory
	group/	1.28 CUG directory
	tmp/	1.28 Temporary swapping directory
	board/	1.28 Board directory
	`filter/	1.28 Filter directory
	data/	1.28 Application data directory
	logs/	1.28 Log analysis data directory
	html/	1.28 Homepage operation directory

In directories including bulletin board ("board/"), group ("group/"), user ("home/") and others, massive amount of data may be accumulated. For efficient use of it, a separate soft link can be installed.

You can download basic package, intracell package and many relative document for installation from follows

```
http://file.segio.com/
```

C. Executing Web Daemon and Configuration of Execution

Webdaemon is executed by the next command line by root

```
root@sm home]# /etc/shhttpd/bin/shhttpd
```

After execution of webdaemon, you can use the system management tool with accessing the first installed intranet.

Automatic Execution Configuration

Even so manual installation, if installation completed by “/etc/shhttpd/bin/configure”, autoexecution configuration add in ntsysv and restart webdaemon with easily method. The other side, if installation by the configure was failed or in case of entirely manual installation, edit and add the next content in “/etc/rc.d/rc.local” file.

```
if [ -f /etc/shhttpd/bin/shhttpd ]; then
    /etc/shhttpd/bin/shhttpd
    echo "shhttpd started"
fi
```

As possible, recommend the registration of ntsysv by the configure.

1.3 Segio Management

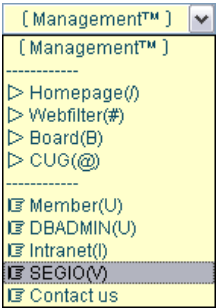
Segio Administrator installs IntraCell or manages shared web resources directory. Segio Administrator is appointed as an “Admin” reserved word in "/etc/shhttpd/conf/shhttpd.conf" file as below.

```
Admin "summer@sm.kseek.com wind@sm.kseek.com "
```

The user “summer” of IntraCell using “sm.kseek.com” as basic domain becomes the Segio Administrator. Summer can install IntraCell using the configuration tool number 0 of IntraCell; however the first IntraCell must be installed manually.

A. IntraCell host management

For new IntraCell installation or to manage the environment commonly used in many IntraCells, you must login as Segio Administrator. Segio Administrator must be appointed as IntraCell Administrator and is allowed to use web management tool as below, explained in Section 1 of Chapter 4.



Above image is the appearance of web management tool provided to log in IntraCell Administrator. When you select “Web hosting management,” Segio management tool as below appears. Segio management tool supports not only the hosting configuration but also the configuration of word, MIME type, icon, group model and others.

Host Setup		Word Setup		Mime Setup		Icon Setup		Model Setup		System Info	
Cell No.	HostNames			BasePath		Disk	User	Mail	Board	Group	Owner
Cell_00	en.segio.com			home/segio/cell00/		40G	3	20	40	10	segio
	aaa.en.segio.com			... aaa/							
Cell_01	b-en.segio.com			home/segio/cell01/		2.0G	17	0	0	0	
Cell_02						0.0K	0	0	0	0	
		IntraCell	2 / 3	VirtHome	1 / 25	MaxUser	20 / 20	Email	20 / 20		
		Board	40 / 40	Group	10 / 15	Messenger	0 / 20				

Above image shows that IntraCell 00 is installed. Below part shows the right of use license information. 02 appears empty and install the additional IntraCell clicking the empty cell number button. Even if you install the IntraCell, IntraCell exceeding the maximum number of cells to be used in Right of Use does not work.

IntraCell Configuration Change

When click the IntraCell number button, appears the management tool for changing the IntraCell hosting information. Follow picture is the hosting information management tool when click the “CELL_00” button and it shows the same feature as the new IntraCell registration.

Host Setup	Word Setup	Mime Setup	Icon Setup	Model Setup	System Info
Cell Configuration 00			Additional HomePages		
HostName	en.segio.com		Host	aaa.en.segio.com	
Directory	/home/segio/cell00/		Path	aaa/	
Owner (UID)	segio		Host		
DiskQuota	40960 MB		Path		
MaxBoard	40				
MaxGroup	10				
MaxUser	3				
MaxLogin	20				
MaxMailUser	20				
Cell Status					
User			3/3		
Disk			3.6M/40G		
Loger			1/20		
Board			20/40		
Group			1/10		
Passwd time		Wed Oct 12 18:25:41 2005			
		SubmitResetCancel			

The left part of the picture is the detail configuration of IntraCell. The right part is the additional virtual homepage and it can be added by the Segio manager by the request of the IntraCell Administrator. The below part of the left shows the brief usage state of the IntraCell. The details of each item and configuration example are as follows.

Item	Details	Example
Hostname	Hostname to be used as homepage URL	sm.kseek.com
Directory	IntraCell directory path	/home/segio/sm/
Owner	IntraCell owner	sysop summer
DiskQuota	Allocated capacity for IntraCell (MByte unit)	4096
MaxUser	Maximum number of users (Maximum number resistible)	2000
MaxBoard	Limitation of board installation	20
MaxGroup	Limitation of Group community installation	20
MaxHome	Limitation of Personal community installation	20
MaxMailUser	Limitation of Email users into IntraCell	20
MaxLogin	Maximum number of users logged into IntraCell simultaneously	20

2 hostnames are entered and both are used as homepage address. The first hostname is displayed in email address. The owner of IntraCell can be entered by user ID and multiple appointments are possible where a blank space is used to separate each of them.

Virtual Homepage

An average of 5 virtual homepages can be appointed for each IntraCell. If IntraCell operates the company homepage, then virtual homepage can be used as separate homepage for events or promotion of products. Below shows the relationship between URL accessing the web server and actual directory corresponds to it.

1. http://sm.kseek.com/	↳ /home/segio/sm/html/
2. http://sm.kseek.com/ddd/	↳ /home/segio/sm/html/ddd/
3. http://ddd.segio.com/	↳ /home/segio/sm/html/ddd/

Number 1 and 2 may look the same since they are located in same HTML document path. Virtual homepage is appointed in relative location of "html/" and therefore it is managed by IntraCell Administrator.

IntraCell Configuration

When the ‘host name’ is clicked from host list, IntraCell configuration tool appears.

IntraCell (segio@en01.segio.com)																																																
Name	SEGIO Web Solution 3.0		Board Icon	en																																												
Idle Time	6000		EffectWidth	98%																																												
List Length	20		Post Quota	0																																												
Page Length	10		Board Quota	0																																												
Language	en		WebMaster																																													
Level Setup MB/Board/Name	0 level	0	0	Guest	5 level	10	2	5Level																																								
	1 level	10	2	1Level	6 level	10	2	6Level																																								
	2 level	10	2	2Level	7 level	10	2	7Level																																								
	3 level	10	2	3Level	8 level	10	2	8Level																																								
	4 level	10	2	4Level	9 level	10	2	Manager																																								
Switch Setup	☒ realname ☒ webmail ☒ messenger ☒ chatting ☒ webdisk																																															
Color Setup	BorderColor	#EEEEEE	BodyBGcolor	#FFFFFF	TextBGcolor	#FFFFFF																																										
	ListBGcolor	#FFFFFF	ListOvcolor	#F6F6F6	ListSWcolor	#EFEFEF																																										
	TextColor	#333333	AtextColor	#333333	BarrierColor	#D8D8D8																																										
	HeadBGcolor	#EFEFEF	ReverseColor	#FF0000	NameBGcolor	#EFEFEF																																										
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Mail Size	30			Mail Menu Width	210																																											
Receive Mail Character set	utf-8																																															
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	windboy				@market/mail .brd																																											
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Save Reset																																																

Appointed administrator or Level 9 Administrator of each cell are given the authority for IntraCell configuration, however, Segio Administrator is also able to restore the mistake by IntraCell Administrator by above method. It is included the webmail configuration.

Installation of new IntraCell

Below image shows how to register new IntraCell by clicking empty IntraCell from host list. For registration of new IntraCell, the screen converted to image below.

Host Setup	Word Setup	Mime Setup	Icon Setup	Model Setup	System Info
Cell Configuration 02			Additional HomePages		
HostName				Host	
Directory	==Select== ☐ Make			Path	
Owner (UID)					
DiskQuota	0			MB	
MaxBoard	0				
MaxGroup	0				
MaxUser	0				
MaxLogin	0				
MaxMailUser	0				
Cell Status					
User				0/0	
Disk				0.0K/0.0K	
Loger				0/0	
Board				0/0	
Group				0/0	
Passwd time					
Submit Reset Cancel					

New IntraCell can be created by entering the host name and IntraCell directory. Enter the disk capacity, maximum number of users and other details and click “Apply” button then it is included in host column. In case that directory is not installed yet, select the IntraCell model, check the “Make” checkbox and press “Submit”, then the new IntraCell is created after making directory. In case of the first installation, enter the directory name and host name, register the host first by adjusting the detail item , again in edit mode can make the directory and register the model. Applying the model make execute only one when make the new directory.

B. Web server configuration

The configuration items of web service applied commonly in all IntraCell of the server include file icons, MIME type, and dictionary by languages, group model and etc. These are used commonly in all IntraCells and located in "/etc/shttpd/conf/" directory.

Configuration of Dictionary by languages

It is possible to select different languages for each IntraCell and Segio Administrator configures the dictionary by languages for this. Below is the image of configuration of Dictionary by languages of English language.

Host Setup	Word Setup	Mime Setup	Icon Setup	Model Setup	System Info
cn en jp kr			Submit	Reset	Remove
			New		
Overall					
Address	Address	err_CellDiskQuota		Ove Cell Disk Quota	
Available	Available	err_DiskQuota		Over Disk Quota	
BoardHead	Board Head	err_ForbiddenChar		Forbidden Character	
BoardIcon	Board Icon	err_InputData		Input Data Error	
BoardQuota	Board Quota	err_InvalidCommand		Invalid Command	
BoardTail	Board Tail	err_InvalidLength		Invalid Length	
Cancel	Cancel	err_InvalidNumber		Invalid Number	
ColorSetup	Color Setup	err_InvalidPasswd		Invalid Password	
Context	Context	err_InvalidPath		Invalid Path	
Copy	Copy	err_InvalidUser		Invalid User	
Date	Date	err_LogOff		Sign out State	
DiskQuota	Disk Quota	err_NoChecked		Not Checked	
FaxNumber	FAX	err_NoData		No Data	
File	File	err_NoFileName		No File name	
GroupAdmin	Group Admin	err_NoNewID		No New ID	
IdleTime	Idle Time	err_NoPassword		No Password	
LeveSetup	Level Setup	err_NoSelected		Not Selected	

Each IntraCell selects one dictionary from what Segio Administrator has configured. Click "Remove" to erase. To add a new language, enter the name of the language using two characters only then click "New" button.

File icon configuration.

File icons are used to display data files included in the posting or to display the file format. Segio Administrator can configure file icons using the management tool as below.

Host Setup	Word Setup	Mime Setup	Icon Setup	Model Setup	System Info
✗ dir.gif					
✗ dir_new.gif					
✗ dir_open.gif					
✗ dir_list.gif					
✗ dir_last.gif					
✗ file_new.gif					
✗ default.gif					
✗ html.gif					
✗ bin.gif					
✗ ram.gif					
✗ swi.gif					
✗ mov.gif					
✗ psd.gif					
✗ zip.gif					
✗ cob.gif					
✗ asf.gif					
✗ text.gif					
✗ flash.gif					
✗ ai.gif					
✗ pdf.gif					
✗ mp3.gif					
✗ doc.gif					
✗ xls.gif					
✗ fla.gif					
✗ hwp.gif					
✗ ppt.gif					
✗ img.gif					

Dimension of the file icons which represents the file format is gif file with 16 pixels width and 16 pixels height. dir_list.gif, dir_last.gif allows a little excess of width and height size including the line connected in the middle in each directory list.

To add a file icon, draw up an icon which fits the specification, select the file using “Find” then transfer. After the transfer enter the extension of related files.

MIME type configuration

MIME(Multipurpose Internet Mail Extension) type configures the file extension to notify file format to web browser when transferring file from web server to web browser. Web browser makes decision if data should be displayed based on MIME type or execute other application. For example, webbrowser make report and recognize that mime type of the file which has the extension“.html” or “.htm”is the “text/html”to web browser. Below image is the MIME type configuration tool screen.

Host Setup	Word Setup	Mime Setup	Icon Setup	Model Setup	System Info
	application/msword	doc			
	application/octet-stream	bin exe dms lha com class			
	application/postscript	ai eps ps			
	application/powerpoint	ppt			
	audio/mpeg	mpga mp2 mp3			
	audio/x-pn-realaudio	ram			
	audio/x-pn-realaudio-plugin	rmp			
	audio/x-realaudio	ra			
	audio/x-wav	wav			
	image/bmp	bmp			
	image/gif	gif			
	image/ief	ief			
	image/jpeg	gpe jpg jpeg			
	image/pds	png			
	image/tiff	tiff tif			
	text/html	html php4 php phtml htm dhtml css shell			
	text/plain	text txt java config c conf rc cpp for js			

MIM type configuration tool is displayed with icons to distinguish file extension. MIME type name and corresponding extension must be separated by a blank space. Erase MIME type name and extension part and click “Apply” to delete.

Design Model

Design Model is the prepared compressed file that will be installed as the basic data when create the closed user group in host configuration or IntraCell. Extension of the compressed file is “*.cob” and it can be downloaded from closed user group management tool of IntraCell in case closed user group model. IntraCell model can be obtained by the shell command instead direct download. Next picture shows design model management screen.

Host Setup	Word Setup	Mime Setup	Icon Setup	Model Setup	System Info
Intracell Model			Group Model		
0.	china-basic	2.2M	0.	@cn-01	Language 132K
1.	china-standard	2.3M	1.	@cn-02	Language 128K
2.	english-basic	4.0M	2.	@cn-03	Language 128K
3.	english-standard	2.5M	3.	@cn-04	Language 128K
4.	japan-basic	5.5M	4.	@cn-05	Language 132K
5.	japan-standard	2.7M	5.	@en-01	Language 116K
6.	korea-basic	3.4M	6.	@en-02	Language 116K
7.	korea-standard	2.3M	7.	@en-03	Language 116K
			8.	@en-04	Language 116K
찾아보기...			9.	@en-05	Language 116K
Submit Reset			10.	@jp-01	Language 112K
			11.	@jp-02	Language 108K
			12.	@jp-03	Language 112K
			13.	@jp-04	Language 112K
			14.	@jp-05	Language 112K
			15.	@kr-01	Language 132K
			16.	@kr-02	Language 132K
			17.	@kr-03	Language 132K
			18.	@kr-04	Language 128K
			19.	@kr-05	Language 136K
			찾아보기...		
Submit Reset					

Method of the registration and deletion of the IntraCell and closed user group model is the same. Select the “*.cob” type data file and click the “submit” button, then register the data file. The name of the registered data file is changed if you edit it and click the “submit”button.

Closed user group set the language in the word dictionary or not. When create the new closed user group in each IntraCell, open the new closed user group assigned the same language or not.

System Information

Segio is constructed to manage the almost all work in web service except the first installation progress. In using the Segio, increasing speed of the accumulated data may be the very important element. So Segio supports the follow screen to show the brief system information to administrator.

Host Setup	Word Setup	Mime Setup	Icon Setup	Model Setup	System Info
Filesystem	1K-blocks	Used	Available	Use%	Mounted on
/dev/hda1	5036284	4328052	452400	91%	/
none	158492	0	158492	0%	/dev/shm
/dev/hda5	11147884	304848	10276748	3%	/home
/dev/hda2	3020172	376020	2490732	14%	/var

--- licence Information---			
Intracell	3	VirtHome	25
MaxUser	20	MaxHome	20
MaxEmail	20	MaxBoard	40
MaxGroup	15	Messenger	20

C. Shared Web Resources

General web resources of the IntraCell exist in “html/” directory or web space of the CUG or user space. Contrarily, shared web resources can be used commonly in IntraCell of all servers and many icons, DHTML editor, and etc exist. Next is the data response order.

Ex). <http://sm.kseek.com/icons/file/dir.gif> Call the “html/icons/file/dir.gif”

- * 1. Transfer If “html/icons/file/dir.gif” file exist.
- * 2. If 1 fail, transfer “/etc/shttpd/icons/file/dir.gif”
- * 3. If 2 fail, transfer "404 not found" error message

If requested file does not exist in low "html/icons/" of IntraCell, shared web resources file gets transferred to the web browser. Below image shows the directory structure of shared web resources.

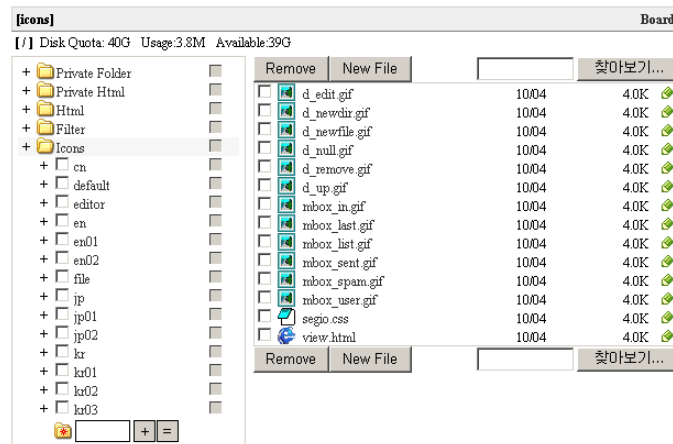


Table below indicates the summary of application for each directory.

Directory name	Details	Remark
default	Basic bulletin board icons directory	Bulletin board, Web mail related
editor	DHTML WYSIWYG Editor directory	
en, en01, en02	English bulletin board icons directory	Bulletin board, Web mail related
file	File type icon	
jp, jp01, jp02	Japanese bulletin board icons directory	Bulletin board, Web mail related
kr, kr01, kr02	Korean bulletin board icons directory	Bulletin board, Web mail related

For IntraCells not to be used as shared web resources, create "html/icons/" directory and locate separate data files. Selective use of shared web resources is possible.

Among the icons not classified as directory, "d_*.gif" is the icon used in management tool and "mailbox_*.gif" is a web mail related icon.

Bulletin board icons (/etc/shttpd/icons/default/)

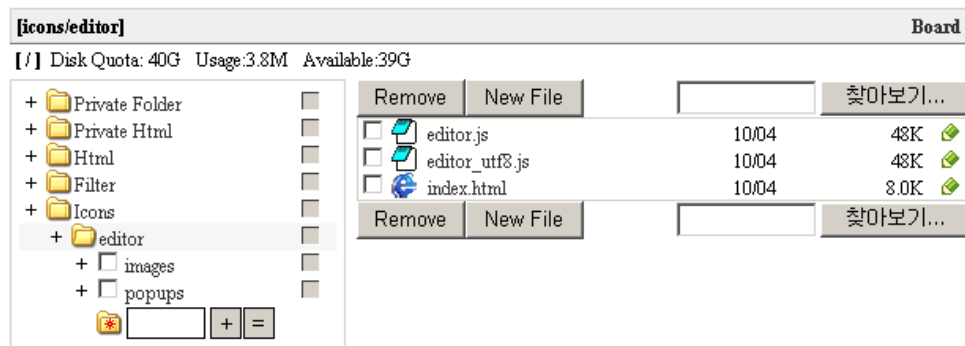
Bulletin board icons are used commonly for web mail, memo, bulletin board and others. Bulletin board icons of the bulletin board or web mail and others can be appointed from configuration. Apart from default icons, various icons about English, Japanese, Korean and etc are provided. Even more bulletin board icons are included depending on the package. Explanation on bulletin board icons follows in Chapter 4.

File icons (/etc/shttpd/icons/file/)

Among the names of shared icons, "file/" directory contains file icons. All file icons configured for relation between file icon type and extension in web service configuration are located.

DHTML Editor (/etc/shttpd/icons/editor/)

DHTML WYSIWYG Editor is used when editing posting for bulletin board or e-mails. To post a posting onto the bulletin board or to modify the existing contents edit filter is provided and script to select DHTML must be included in this edit filter. For application examples, please refer to the explanation part of edit filter.



Above image show the internal information of shared directory "icons/editor/" by web directory management tool. Lower directories including "image/" and "popups/", and "editor.js" file are located. In "popups/" directory HTML documents acting by pop-up window with multi purpose are located.

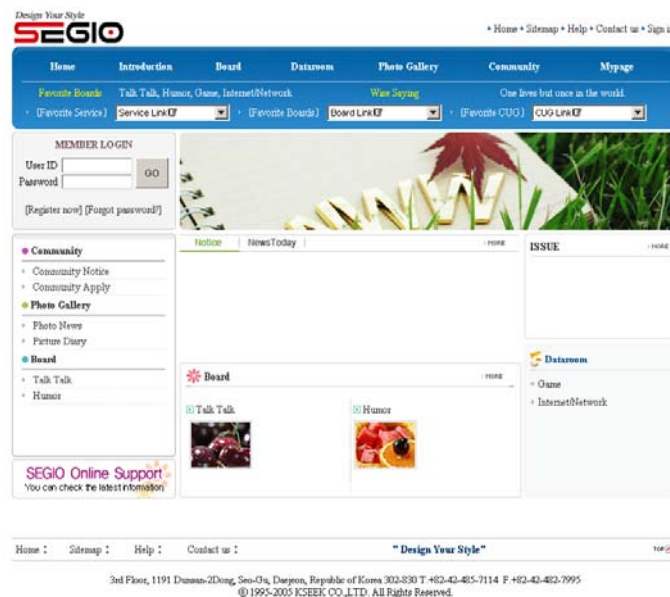
You can organize the color selection part for bulletin board configuration to use html document for pop-up in "popups/" directory. Netscape, Mozilla and some other web browsers do not support WYSIWYG Editor.

Chapter 2 HTML Web Service

Segio as a Web Daemon provides web service based on HTML documents. Also, it has basic applications including intranet, bulletin boards, web mail and etc. Web filtering, one kind of the scripts is introduced to organize additional application to be included in HTML documents dynamically.

2.1 Homepage & Intranet

Segio provides IntraCell-based web service. IntraCell is a divided unit which allows utilizing entire functions of Segio by corresponding one representative host address and homepage and intranet can be implemented. Next is the one of the Segio Intranet models.



A. Homepage

HTML documents for implementation are located in "html/" directory of IntraCell. "index.html" or "index.htm" document of directory is the starting point. Homepage has address system recognized by

URL (Uniform Resource Location) having hostname and protocol (http://) combined together. It is the most commonly used and is notated as below.

http://sm.kseek.com/	↳ html/
http://sm.kseek.com/icons/	↳ html/icons/
http://sm.kseek.com/icons/top_intra.gif	↳ html/icons/top_intra.gif

Homepage can be completed by linking HTML documents, images and various kinds of multimedia data files located in lower directory.

Personal Homepage

Personal homepage is a webpage owned by an intranet user and recognized by URL which has server address and user ID combined. Below is the example of personal homepage.

http://sm.kseek.com/sysop/	↳ html/sysop/
http://sm.kseek.com/~sysop/	↳ home/s/sysop/html/

Identifier ("~") which indicates the personal homepage refers to the user ID and transfers HTML documents from other directory. Directory with the format "html/~sysop/" does not exist.

Group Homepage

In intranet, Group function is provided to service with separate authentication system between registered users. Below is the example of the group homepage.

http://sm.kseek.com/@game/	↳ group/game/html/
----------------------------	--------------------

B. Intranet

IntraCell maintains the independent user registration system and use of service is limited depending on the user level.

User authorization

Users are classified into 10 levels (0~9) where Level 0 indicates the guests not registered as users and Level 1 to 8 the normal user. Level 9 is IntraCell Administrator. Level 9 IntraCell Administrator can manage administrator management system and also HTML documents, bulletin boards, group and others. Webmaster can be assigned independent of the level in IntraCell configuration as the IntraCell operation helper and he can edit HTML documents and related directories. But has no right to manage HTML documents in the group and user space.

User Authentication in Group

Group is used by user registered in IntraCell joining as a member. Member level system has 10 levels, which varies from Level 0 to Level 9 and Level 9 user becomes the Group Administrator. Level 0 is not applied user and Level 1~8 is the general user. Webmaster can be assigned in group configuration as the group operation helper and he can edit HTML documents and related directories. Group Administrator has further authority to make decision on user level besides management of bulletin boards and web documents.

User authentication in Personal space

Personal space of user can be used as a small sized community by adopting member management system of the group. It has a 10-level member system and the user himself becomes the Administrator. Also he appoints 9 level and entrust the management.

2.2. Web Filtration Script

Segio implements intranet service from normal HTML documents. A script, so called web filtering, was introduced to implement intranet based on HTML. Web filtration script is the method to enforce the more flexibility of the web design for services like the intranet, board, group and etc. included in web daemon.

A. Web Filtration Notation

Web filtration breaks up certain syntax from HTML document, converts it then transfers the result to the web browser. Filter codes are "#! ... ;" format syntax where "#!" represents the beginning of the filter code and ";" means the end of the code. Below is the notation method of filter codes.

*comma(,) is used delimiter of filter reserved word with other options as below.

Form) #![Filter reserved word],[Option 1],[Option 2],...;

E.g.) #!u.name;  user name

*Filter reserved word is indicated as inclusive relationship between the main reserved word and lower reserved word by a period(.)

E.g.) #!p.m_del,Erase;  Delete button in board

* #!if, #!else, #!fi; signs the some block.

E.g.) #!if lv<1; Guest #!else;#!u.name;#!fi; Welcome.

Web Filtration Code Reserved Words

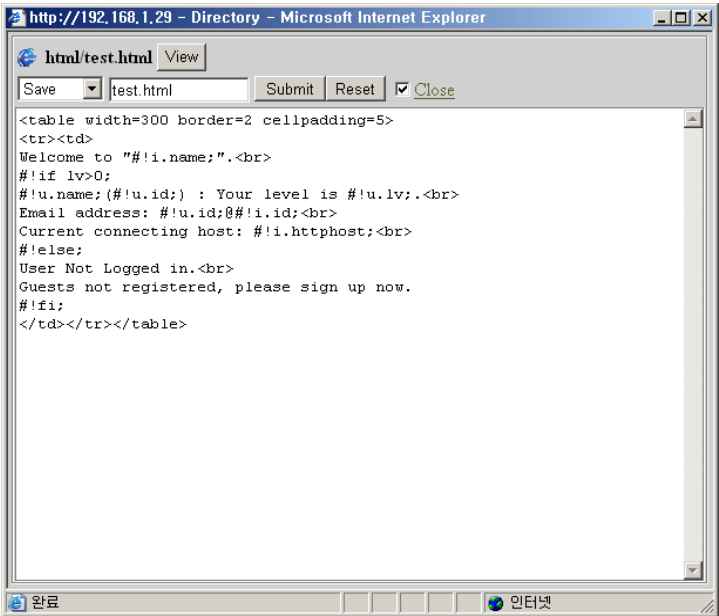
Below are the main reserved words which can be used for web filter codes.

Reserved words	Details	Reserved words	Details
if,else,fi	Indicates the conditional statement of the filter	i	Intranet cluster reserved words
brief	Summarized list of the bulletin board	popup	Create pop-up window with specific purpose
load	Insertion module of server side (html,cgi)	b	Collective reserved word for boards
return	Terminate filtering.	u	Collective reserved word for users
href	URL indication of direct link	p	Collective reserved word for posts
shell	Appoint shell	<#>	#Character reserved word
style	Web components indication (Color...)	icon	File extension icon reserved word
l	Accessing point (Location) information	error	Collective reserved word for error notification

* “#!m;”, “#!addr;”, and etc are related to the webmail and discussed in section 2 of chapter 5.
Below is the example of web filtration used.

Welcome #!u.name;(#!u.id;).	1.29 Welcome Summer(summer)
	1.29 Only operated when singin.

Below is more complicated example of web filtration.



From HTML document, after breaking the syntaxes written in “#!!...;” format and transmit different data to the guest (left) and to the user (right) as below.

Welcome to "SEGIO Web Solution 3.0". User Not Logged in. Guests not registered, please sign up now.	Welcome to "SEGIO Web Solution 3.0". segio(segio) : Your level is 9. Email address: segio@en.segio.com Current connecting host: 192.168.1.29
---	---

From upper right picture, “#!i.httphost;”show that the address that user input the host address is “http://192.168.1.29/”.

B. Branch and Information indicating reserved words

It branches the status (user level) of connected user at web filtering by conditions to show different information. Reserved words for branching and information display are useful for general HTML documents.

#!i;

It is a filtering reserved word which expresses the basic information of IntraCell. It can be displayed the basic configuration and usage of the IntraCell.

#!i.id;	1.28 Default hostname(It can be used in Email address).
#!i.httphost;	1.28 Hostname requested by web browser (Port number included)
#!i.name;	1.28 Service name appointed from IntraCell configuration
#!i.boardicon;	1.28 Bulletin board icon appointed from IntraCell configuration
#!i.owner;	1.28 IntraCell owner appointed from Host configuration

Referring from the chapter 1, IntarCell is one of the dependent space and support the limited service of the resources like board, disk usage, number of sign in users, web users, and etc.

Below is the reserved word which shows the usage state of the IntraCell.

#!i.diskquota;	1.28 Available Disk quota of IntraCell
#!i.usage;	1.28 Disk Usage ratio of IntraCell(only shows the %)
#!i.data;	1.28 Disk Usage of IntraCell
#!i.userdata;	1.28 User Usage of IntraCell
#!i.groupdata;	1.28 Group Usage of IntraCell
#!i.htmldata;	1.28 HTML Quota of IntraCell
#!i.maxuser;	1.28 Limitation of maximum users of IntraCell
#!i.maxlogger;	1.28 Limitation of maximum sign in users of IntraCell
#!i.maxmail;	1.28 Limitation of maximum email users of IntraCell

Next are the reserved words which expand the use of web service with applying the ActiveX, JVM, and etc and they are related to the calling of the chatting and web disk

#!i.chat;	1.28 Loading the chatting module by ActiveX
#!i.javachat	1.28 Loading the chatting module by JavaVirtualMachine
#!i.webdisk	1.28 Loading the ActiveX Webdisk.
* Use related to #!u.wakeup;	

Calling method of Webdisk is explained in section 1 of chapter 4 and Calling method of chatting explained in section 1 of chapter 5.

#!if...; ~ #!else...; ~ #!fi;

Filtering allows branching by conditional statements. In statements comparing the level, recognition reserved word is located on the left hand side and on the right, the level number to be compared should be positioned.

#!if u.lv > 3 && u.lv < 8;	1.28 If the level is higher than 3 and lower then 8
#!if u.lv gt 3 && u.lv lt 8;	1.28 Same as above
#!if l.lv gt 3;	1.28 If the level in Group(or personal) are is higher than 3
#!if l.owner;	1.28 If you are administrator(include Level 9)
#!if l.webmaster;	1.28 If you are assigned as the webmaster(include the Level 9)
#!if l.board;	1.28 If there are board space
#!if l.html;	1.28 If there are homepage space
#!if l.folder;	1.28 If there are web folder space
#!if l.mbox;	1.28 If there are mail space

If it is inconvenient to use web page editor for conditional statements require tag signs ('>', '<') to denote, it can be expressed as below.

#!if u.lv .gt. 3;	1.28 If higher than Level 3
#!if u.lv .lt. 3;	1.28 If lower than Level 3
#!if u.lv .ge. 3;	1.28 If same or higher than Level 3
#!if u.lv .le. 3;	1.28 If same of lower than Level 3
#!if u.lv .eq. 3;	1.28 If Level 3
#!if u.board;	1.28 If there are user's board space
#!if u.html;	1.28 If there are user's homepage space
#!if u.folder;	1.28 If there are user's webfolder space
#!if u.mbox;	1.28 If there are user's mail space

Below is the example that braching condition is the IntraCell configuration.

#!if i.webmail;	1.28 If support the webmail in Intranet
#!if i.messenger;	1.28 If support the messenger in intranet
#!if i.javatalk;	1.28 If support the java 1 to 1 chat
#!if i.realname	1.28 If it use the realname in intranet

Branching statement according to conditional statement are used in filter reserved words related to the board and explained separately. Branching statements related to the board are explained in filter reserved word part related to the board.

#!l...; (location)

It displays information related to user access point (location). Location means the location of the HTML document requested by web browser. It distinguishes intranet, Group and personal domain and is used to display the owner or user level specified within the domain.

#!l.id;	Location ID (Game Group:@game; Sysop's HOME:~sysop;)
#!l.name;	Service name appointed from location configuration
#!l.owner;	Appointed Administrator(Appointed Administrator for Group, personal space)
#!l.base;	URI of current location to directory -> Effective when linked
#!l;	Shows the default path of current location
#!l.uri;	Displays currently called URI
#!l.referer;	Referral page to previous step of called webpage
#!l.data;	Total size of occupying data (KB)

Below image is the capture of web page when Level 9 user 'sysop' is logged in and access the personal homepage of user “summer”.

Administrator(segio)'s screen	
#!l.id;	~summer
#!l.uri;	/~summer/index.html
#!l.base;	/~summer/
#!l.lv;	9
#!u.lv;	9
#!l.owner;	summer
#!l;	/~summer/

Administrator(segio)'s screen	
#!l.id;	~summer
#!l.uri;	/~summer/ddd/index.html
#!l.base;	/~summer/ddd/
#!l.lv;	9
#!u.lv;	9
#!l.owner;	summer
#!l;	/~summer/

Below are the capture of web page when Level 2 user ‘summer’ access self personal homepage.

summer(summer)'s screen	
#!l.id;	~summer
#!l.uri;	/~summer/index.html
#!l.base;	/~summer/
#!l.lv;	9
#!u.lv;	2
#!l.owner;	summer
#!l;	/~summer/

summer(summer)'s screen	
#!l.id;	~summer
#!l.uri;	/~summer/ddd/index.html
#!l.base;	/~summer/ddd/
#!l.lv;	9
#!u.lv;	2
#!l.owner;	summer
#!l;	/~summer/

Upper two pictures are composed of the two tables. These tables are saved in different web pages and showed as one web page by the “#!load;” filtration. In 2nd rows in table, there shows the URI of the saved page. ‘summer’ is the user assigned Level 2 but in self personal homepage, Local Level is 9 Level. Location reserved word also sign the sevice usage statistics of the Location. Below is the lower reserved

#!l.diskquota;	1.28 Allocated disk space.(Only shown if location is in the Group)
#!l.htmldata;	1.28 Size of occupied space by Homepage
#!l.boarddata;	1.28 Size of occupied space by boards
#!l.boards;	1.28 Number of bulletin boards
#!l.posts;	1.28 Number of posts
#!l.mails;	1.28 Number of mails
#!l.mboxes;	1.28 Number of mboxes
#!l.etcdata;	1.28 Size of occupied space by others
#!l.mboxdata;	1.28 Size of occupied space by Mailbox (When location is personal space)
#!l.bname[Number];	1.28 [Number]th board name where number starts from 0
#!l.bid[Number];	1.28 Print the [Number]th board ID
#!l.buri[Number];	1.28 [Number]th board's URI for anchor
#!l.gname[Number];	1.28 Print the [Number]th group name
#!l.gid[Number];	1.28 Print the [Number]th group ID
#!l.guri[Number];	1.28 [Number]th group's URI for anchor
#!l.newpost;	1.28 New posts (Number of posts uploaded today)
#!l.newmail;	1.28 New mail (Unread mails in Inbox, Works in personal area only)
#!l.newmemo;	1.28 New memo (Unread memos, Works in personal area only)

Expressions in “#!l.gname[]”, “#!l.gid[]”, “#!l.guri[]” format are useful when linking groups automatically. They are not operated in personal homepage and group homepage. With a similar type, “#!l.bname[]”, “#!l.bid[]”, “#!l.buri[]” format are useful when linking boards automatically by using Java script as below.

```
<script>
function board_link(buri,bid, bname){
    if(bid.length<1)return;
    if(bname.length<1)bname=bid;
    document.wirte("<a href="+buri+">" +bname+"</a><br>");
}
</script>
<script>
if(#!l.boards;>0){
    board_link(#!l.buri[0];,"#!l.bid[0];","#!l.bname[0];");
    board_link(#!l.buri[1];,"#!l.bid[1];","#!l.bname[1];");
    board_link(#!l.buri[2];,"#!l.bid[2];","#!l.bname[2];");
    ...
}
</script>
```

If 3 or less boards are created in personal or Group area, all boards are automatically linked. Modification of board numbers or design change is possible.

Lower reserved words to display location access statistics are provided identically in #!u; and used to indicate the access statistics of the connected users. Lower reserved word of #!u; displays usage statistics no matter the location of HTML document used. * “#!if l.board;” is the true when

there have the lower directories which is available to install the board. “#!l.boards;” displays the number of the boards installed in the location.

#!/load...;

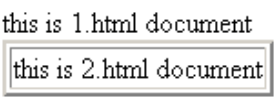
It plays a role to include other HTML document. It is a similar function to SSI (Server Side Include) and used not only to include the HTML document but also the result from CGI execution.

#!/load./cgi-bin/test?act=on;	↳ Including the CGI execution result
#!/load./top_menu.html;	↳ Including the contents of /top_menu.html file
#!/load./advert.php;	↳ including the /advert.php execution result
#!/load,!menu.html;	↳ if start with ! character, compute the relative URI of the URL document's directory

When supporting HTML document of other location is combined and filtered by #!load; location acts based on the location of the supporting HTML document to be combined.

1.html	2.html
<pre><html> <title> 1. html</title> <body> this is 1.html document
 #!/load 2.html; </body></html></pre>	<pre><table border=2> <tr><td> this is 2.html document </td></tr> </table></pre>

Upper two documents are showed like next picture when “1.html” document load in web browser.



Segio suggest the extended concept of document combination with “#!/load;” and “#!/shell;” corresponding with the SSI which is the method of Apache’s web document combination

#!/popup...;

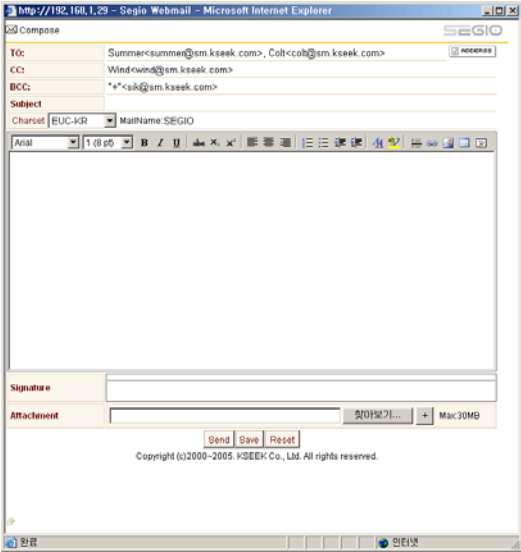
It is replaced to Java script to open a pop-up window. Compose, write on board, web mail and other services are implemented to create a pop-up window. * It operate if you composed with the javascript after getting the URI directly, but recommend the standard method suggested in the manual to apply the changes without an error after upgrade.

E-mail service	Web mail link.
<a href=# onclick="#!popup.mail,to='Summer<summer@sm.kseek.com>','>Summer mail	Mail link
To Administrator	/master.brd Compose window
Notice board	Open notice board
	Open url directly

Mail can be sent to multiple users as below.

<a href=# onclick="#!popup.mail,to='Summer<summer@sm.kseek.com>, Colt<colt@sm.kseek.com>','cc='Wind<wind@sm.kseek.com>',' bcc=''+<sik@sm.kseek.com>','width=700px,height=700px;">Mail to, cc, bcc above is for sample only.
--

HTML document above links a pop-up window which can edit and send web mail by a word “Mail. Click "Mail" and pop-up window appears as below.



Next explain the kind and function of the lower reserved words of the“#!popup;”

Lower reserved word	Details	Remark
lboard	List window of the board of the location(shell=None)	
lpost	Post window of the board of the location	
board	List window of the board	
post	Post window of the board	
login	Window of the Login	
webmail	Window of the Webmail service	
mail	Window of the mail compose	

Detailed specification can be done using following reserved words.

Variable name	Details	Remark
width	Specify the width of window to be opened	
height	Specify the height of window to be opened	
shell	Specify shell effect of window to be opened	none
resizable	Property of window to be opened (size adjustable)	on/off
To	Recipient (To:) of Email compose	
cc	Referral (Cc:) of Email compose	
bcc	Blind referral (Bcc:) of Email compose	

Below is an example where decision is made on the width and the height size being adjustable in `#!popup`; filter.

<code>#!popup.webmail,width=780px,height=600px,resizable=1;</code>	Specify the size of Width and height
--	--------------------------------------

"`#!popup`;" reserved word is converted to Java script with form of "`event.returnValue=false;window.open(...);`;" therefore do not specify "`event.returnValue=false;`" separately. If the width size of the Signin window set less than 300, after sign in, the popup window is closed and the now web pages is refreshed.

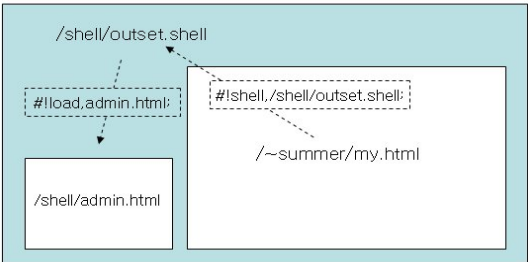
`#!shell,[shellname];`

It is to specify the shell document which indicates the outline of HTML document. Shell document has extension "shell"(E.g., `index=> index.shell`) and is located in HTML document directory of IntraCell.

Format: <code>#!shell,[shell name];</code>	※ .shell not attached to the shell name
Example: <code>#!shell,/main/;</code>	/main/index.shell document of absolute path is in action
<code>#!shell,/@game/main.shell;</code>	game Group main.shell document is in action
<code>#!shell;</code>	Inheritance shell or default shell is in action.
<code>#!shell,=/main.shell;</code>	/main.shell is in action, Specify inheritance filter

A reserved word "`#!shell;`" is explained in detail to implement HTML shell in the section 3 of Chapter 2. Below is a diagram of HTML document combined by `#!shell;` and `#!load;`.

Location: <http://segio.net/~summer/my.html>



For the first stage of filtering, "/shell/outset.shell" is loaded by "#!shell...;" then filtered. For the second stage of filtering, "shell/admin.html" document is loaded by "#!load...;" and the third stage of filtering is proceeding. The datum point of location gets refreshed when filtering is processed by syntaxes "#!load;" and "#!shell;" reading the HTML document. In the section 3 of Chapter 2, explain the split the screen by the frame of the web browser, SSI and etc. and method of the document combination by the “#!load;”. Refer the section 3 of Chapter 2 about the usage of “#!shell;”.

#!style...;

"#!style;" stores elements such as various colors and font size required for the structure and allows HTML document to utilize them if needed. Configuration setup in intranet, Group, board and web mail has different priorities severally to construct the style.

#!style.bordercolor;	1.28" Border color of table
#!style.barriercolor;	1.28" Dividing color of border between headline and the list
#!style.bgcolor;	1.28" Background color
#!style.headbgcolor;	1.28" Title line (Headline) background color
#!style.namebgcolor;	1.28" Background color for name field
#!style.textbgcolor;	1.28" Font color for normal text
#!style.reversecolor;	1.28" Font color for revered text
#!style.atextcolor;	1.28" Font color for anchored text
#!style.listbgcolor;	1.28" Background color for post list etc
#!style.listovcolor;	1.28" Color to be converted to when mouse is over the list
#!style.listswcolor;	1.28" One of two color pattern to be repeated on the board list
#!style.bodybgcolor;	1.28" Background color of HTML body
#!style.fontsize;	1.28" Font size for normal text
#!style.effectwidth;	1.28" Effective width

Configuration in IntraCell, Group, personal area, web mail, boards and others demands specification of variable related to "#!style;". If the value is not specified of "#!style;" syntax is not used in HTML document then it does not work.

#!u...;

It is a filter reserved word to express the information of connected user. It has following lower reserved words. In connected user's point of view, information which may be interpreted as “MY” including my userID, my username and my level.

#!u.id;	1.28" Connected user's UID
#!u.name;	1.28" Connected user's User name
#!u.lv;	1.28" Connected user's level

User has both user level (#!u.lv;) and location level (#!l.lv;). User level is effective in all parts of intranet and appointed level by IntraCell Administrator. Location level is the level given as a member of a Group or personal space. Location level in normal IntraCell is displayed together with the user level.

In "#!u;" lower reserved word which indicates the usage statistics of "My space statistics" as below and has similar structure to the location. .

#!u.diskquota;	1.28 Disk space quota usable
#!u.htmldata;	1.28 Size of space occupied by Homepage
#!u.boarddata;	1.28 Size of space occupied by boards
#!u.boards;	1.28 Number of boards
#!u.etcdata;	1.28 Size of space occupied by others
#!u.mboxdata;	1.28 Size of space occupied by mailbox (Limited to personal area)
#!u.bname[number];	1.28 [number]th board name number starts with 0
#!u.bid[number];	1.28 Print the [number]th board ID.
#!u.newpost;	1.28 Number of new posts (based on posts uploaded today)
#!u.newmail;	1.28 Number of new mails (Unread mail in Inbox)
#!u.newmemo;	1.28 Number of new memos (Unread memo)

In #!l; reserved word, there is the javascript to display automatically using the URL and Name in menu when some number of the boards are created in Group or personal space. As the same concept, following javascript is used to link automatically the boards of the connected user in some location.

```

<script> //It's the same as previos introduced function.
function board_link(buri,bid, bname){
    if(bid.length<1)return;
    if(bname.length<1)bname=bid;
    document.wirte("<a href='"+buri+"'>"+bname+"</a><br>");
}
</script>
<script>
if(#!u.boards;>0){
    board_link("#!u.buri[0];", "#!u.bid[0];", "#!u.bname[0];");
    board_link("#!u.buri[1];", "#!u.bid[1];", "#!u.bname[1];");
    board_link("#!u.buri[2];", "#!u.bid[2];", "#!u.bname[2];");
    ...
}
</script>

```

* "#!if u.board;" is the true when there have the lower directories which is available to install the board. "#!l.boards;" displays the number of the boards installed in the location.

#!error;

It displays server errors. It is used when displaying a server error by error filter specified with "_err_*.htm". User level 9 and webmaster can check the system error message.

```
#!shell;  
An error has occurred.<br>  
#!error;<br>
```

#!href,...;

It is a reserved word which displays the URI and URL of certain functions and used as below.

Managing my homepage	☞ Limited to registered users
href="#!href.webmail;">web mail	☞ web mail service conversion link

Below is a summary of various lower reserved words and their meanings of #!html;.

#!href.admin.myhtml;	☞ My homepage management
#!href.admin.html;	☞ Homepage management
#!href.admin.myboard;	☞ My boards management
#!href.admin.mymbox;	☞ My mail box management -> Used in web mail
#!href.admin.board;	☞ Bulletin boards management
#!href.admin.filter;	☞ Filter management
#!href.admin.host;	☞ Hosting management
#!href.admin.lcell;	☞ Location cell -> group, personal space configuration link
#!href.admin.mycell;	☞ Connected User configuration link(included the webmail)
#!href.admin.cell;	☞ IntraCell configuration
#!href.admin.group;	☞ Group management (Create, Erase, Configuration etc)
#!href.webmail;	☞ Web mail service (3 tier frame structure)
#!href.admin.lboard;	☞ Board management tool in Groups or personal boards
#!href.admin.lhtml;	☞ Web directory management tool in Groups or personal boards
#!href.admin.luser;	☞ Member management tool in Groups or personal spaces
#!href.admin.user;	☞ User management tool of IntraCell
#!href.login;	☞ Used in format of <form action="#!href.login;"> for login.
#!href.webmail;	☞ Web mail URL link; Please compare it with #!popup.webmail;
#!href.logout,[URL];	☞ Displays logout url , [URL] relocated after login

Below links the HTML document management tool of Group (or user) space and board management tool.

```
#!if l.lv>8;  
<a href="#!href.admin.lboard;">Board management</a><br>  
<a href="#!href.admin.lhtml;">HTML document management</a>  
<a href="#!href.admin.luser;">Member management</a>  
#!fi;
```

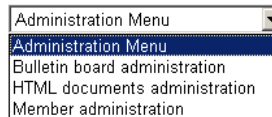
Java script can be applied to change it as an interface.

```

#!if lv==9;
<script>
    function admin_page_change(Select) {
        aurl=Select.options[Select.selectedIndex].value;
        if(aurl.length>0)document.location.replace(aurl); // Execute only when value is specified.
        Select.selectedIndex = 0; // Restores after execution.
    }
</script>
<select name=admin_menu onChange="admin_page_change(this);">
<option value="">>Administration Menu</option>
<option value="#!href.admin.lboard;">Bulletin board administration </option>
<option value="#!href.admin.lhtml;">HTML documents administration </option>
<option value="#!href.admin.luser;">Member administration </option>
</select> #!fi;

```

If you have the location level 9, you can use the management tool as following.



If syntaxes as above is included in HTML document combined by "#!load...;" or "#!shell...;", board of HTML document location and HTML document management tool is linked.

Ex. 1) Logout Logout then move to "/"
 Ex. 2) Logout Logout then move to locationHome

If variable is not declared in "#!href.logout,[Variable];" which represents logout, it moves back to the location home after logging out. Location home is an URL which becomes the default to HTML documents. Relationship between URL which called logout and to shift to after logout is as below.

http://sm.kseek.com/news.html http://sm.kseek.com/
 http://sm.kseek.com/@game/news/news.html http://sm.kseek.com/@game/
 http://sm.kseek.com/~summer/news.html http://sm.kseek.com/~summer/

C. Bulletin board related reserved words

SEGIO has the web bulletin board function in web daemon basically. Therefore, it support the web filtering script to easily manage the design element of the web bulletin board at general HTML document.

#!brief...; Board summary list

It displays a part of latest posts from board on HTML document. It saves a summary of list except replies from the board and inserts it into HTML document when called. Below is an example of inserting 6 latest posts onto the notice board.

Format: #!brief,[BoardID], option1, option2, ...;
Example: #!brief,notice,style=Title//80/50:Date//35,l=6,lh=20;
 The latest 6 postings of notice board are displayed with line height size: 20px.

Lower options are used to adjust list style, number of posts, height of list cell etc.

Lower option reserved words	Functional details	Configuration example	Remark
style	Appoint the style of the list	style=title//80/50:date//35	Refer to board configuration
l	Number of lines to be displayed	l=5	
lh	Height of one line	lh=20	
bg	Background color	bg=#FFFFFF	
sw	Switch color	sw=#FFFF00	
ov	Mouse over color	ov=#00FFFF	
Clen	Length of body brief	Clen=256	shortcut

When color is not setup specifically, it is transparent.

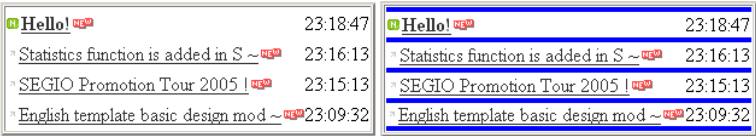
Below is the example of css style which is applied to "<td>~</td>" of summary list.

Class name	Details
brieflist	Applied to all cells except the last list
brieflast	Applied to the cell organizes the last list

Below is the example of how to establish a style.

<style>
.brieflist {padding:1;border-top-style:solid;border-top-width:4px;border-color:#0000ff; }
.brieflast {border-top-style:solid;border-width:4px;border-color:#0000ff; border-bottom-style:solid;border-bottom-width:4px; }
</style>

Two images below show the difference between effect given and not given.



* Warning : Do not apply the board brief list by the“#!brief,” syntax in the HTML shell. If HTML shell which include the brief list make display the same board’s list, it operates something wrong. In principle, be careful not to display the brief list and general list in one URL at the same time.

* In “#!brief;” syntax, as the expression of the image file included in web document, imagecut, shortcut, and etc are used or if you select the thumb item, you must add the “_thumbnail_view” javascript. “_thumbnail_view” will be introduced in writing method of board list filter of sentence 2 of chapter 3.(* it must go with _resize function.)

#!b...;

Mainly used in web filters for list, edit, read etc. of the board. Lower reserved words in "m_*" format displays the certain functions with the icon image.

#!b.m_seek;	1.28 Search menu
#!b.m_post;	1.28 Write menu
#!b.m_remove;	1.28 Delete menu
#!b.m_merge;	1.28 Merge menu(reserved)
#!b.m_copy;	1.28 Copy selected posts (copy to other board)
#!b.m_paste;	1.28 Paste copied posts
#!b.m_move;	1.28 Move menu(reserved)
#!b.m_undel;	1.28 Restore menu
#!b.m_list;	1.28 Total board list menu
#!b.m_setup;	1.28 Bulletin board configuration menu
#!b.m_refat;	1.28 Fat restoration menu

Apart from these are related to board information of HTML structure of web browser.

#!b.id;	1.28 ID of the board(same as the directory name)
#!b.name;	1.28 Name of the board(configuration value)
#!b.uri;	1.28 Access URL of the board
#!b.head;	1.28 Head part of the board
#!b.tail;	1.28 Lower part of the board
#!b.pquota;	1.28 Upload quota per post (Mbyte)
#!b.bquota;	1.28 Board usage quota (Mbyte)
#!b.pages;	1.28 Total number of pages
#!b.posts;	1.28 Total number of posts managed from the list
#!b.pageno;	1.28 Current page
#!b.pagelist;	1.28 Page selection menu
#!b.querybox;	1.28 Display Search Query box
#!b.postlist;	1.28 Post list
#!b.postno;	1.28 Post number
#!b.totalposts;	1.28 Total number of posts

ID of the board is the same as the installed directory name. Name is displayed as the configuration value of the board’s name and URI shows the former board’s address. Board’s URI can be displayed with location and id. Also, “#!b.uri;” is the same as “#!l;#!b.id;.brd”.

Name of additional variable of the board is declared in format of "#!b.var[number];" where number is between 0~25.

#!b.var[0];	1.28 0th additional variable name
#!b.var[1];	1.28 1st additional variable name
#!b.var[2];	1.28 2nd additional variable name
.....	
#!b.var[25];	1.28 25th additional variable name

#!p....;

Bulletin boards operate 3 different kinds of web filters for listing, editing and viewing (or reading) purpose. "#!p...;" syntax is used mainly in edit filter and view filter. Reserved words in "m_*" format connects board icons with related special functions.

#!p.m_list;	1.28 To list
#!p.m_up;	1.28 See up (next)
#!p.m_move;	1.28 Move
#!p.m_reply;	1.28 Reply
#!p.m_del;	1.28 Delete
#!p.m_back;	1.28 Go back
#!p.m_edit;	1.28 Edit
#!p.m_down;	1.28 See down (previous)
#!p.m_print;	1.28 Print

Below are reserved words which display the information of board itself.

#!p.id;	1.28 Indicate ID of the post (Physical number related to the actual stored location)
#!p.no;	1.28 Number of the post (Call number from board view)
#!p.pid;	1.28 Indicate the ID of parental post (Physical number related to the actual stored location)
#!p.read;	1.28 Number of hits (Number of times read)
#!p.uid;	1.28 Author ID
#!p.uname;	1.28 User name
#!p.date;	1.28 Date of post submitted (yyyy/mm/dd) -> 2004/08/31
#!p.time;	1.28 Time of post submitted -> 09:32:12
#!p.art_up;	1.28 Link the post up (next post)
#!p.art_dn;	1.28 Link the post down (previous post)
#!p.words;	1.28 Indicate the comments written on the post
#!p.rname;	1.28 Indicate the real name if it exists
#!p.title;	1.28 Posting title
#!p.ctype;	1.28 Content type of the post (text, html or etc)
#!p.email;	1.28 Web mail included in the post
#!p.writer;	1.28 Author of the post; Indicated with various forms using name, user name(uid), web mail link , etc.
#!p.url;	1.28 URL recorded in the post
#!p.context;	1.28 Contents of the post and underline(_) is not added in case of WYSIWYG editing

The contents of the post and data file are integrated and stored. Data file is classified into two categories; inline file which is shown along the contents of the post and attached file which is not included in the contents.

#!p.file;	1.28 Link and display the list of attached files
#!p.fname;	1.28 Search the name of attached file
#!p.furi;	1.28 Searched attach file's access URI address Used like type
#!p.cfname;	1.28 Search the name of inline file
#!p.cfuri;	1.28 Searched inline file's access URI
#!p.filecheck;	1.28 File selection display from edit filter (Selection must be made if there is any attached file or not)

The images inserted while writing a post is decorating the contents and therefore they are inline files. Along with the file name, it is given a value called CID (Content-ID). Unlike this, file uploaded by selecting a file from file selection window is attached file and not given a CID. "#!p.cfname;", "#!p.cfuri;", "#!p.furi;" and "#!p.fname;" searches file name using extension and indicate.

```
<script>
var fname="#!p.furi[0].jpg gif bmp";
if(fname.length>4)
document.write('<a href="'+furi+'"></a><br>');
// Among the files with extension jpg, gif and bmp, if there is a name for the 0th file, link it.
</script>
```

It can be implemented to execute the attached file of a post by using the method above. Multimedia files such as music and movie clips can be played when you are reading a post, and it supports various functions when ActiveX control is inserted.

For every board, posting has up to 26 additional variables and its format is "#!p.var[number];" where number is allowed from 0 to 25.

#!p.var[0]	1.28 0th additional variable
#!p.var[1]	1.28 1st additional variable
.....	
#!p.var[25]	1.28 25th additional variable

Additional value is closely related to "#!b.var[0];" and can be used in combination with "#!if...;" and others.

```
#!if b.var[0];
<tr>
<td>#!b.var[0];</td>
<td><input name='var[0]' value="#!p.var[0];" class=input></td>
</tr>
#!fi;
```

If upper HTML is included in edit filter in board, edit filter receive the data only in the case of indicating the 0th extended variable at configuration.

#!if...; ~ #!else ...; ~ #!fi;

Web filtering allows the branching of HTML document by conditional statements. Web screen related to the main functions of the board, list, view, edit is embodied by each other exclusive filter file, in this document frequently used the branching document fo the board.

#!if b;	1.28 If board is opened
#!if b.post;	1.28 If the post of board is already read
#!if b.bquota;	1.28 If the board quota has been configured
#!if b.pquota;	1.28 If it is possible to attached some data to the post
#!if b.owner	1.28 If it is the owner
(Magnified analysis: If give the administration authority, include Level 9)	
#!if b.viewlock;	1.28 If the board supports 'View Lock'
#!if b.file;	1.28 If the file attachment is possible
#!if b.remail;	1.28 If the board supports automatic reply
#!if b.var[0];	1.28 If the name of the 0 th variable of the board is declared
#!if b.var[n];	1.28 If the name of the n th variable of the board is declared; n is the number between 0~25
#!if p.owner;	1.28 If it is the owner of the post (Given a management authority)
#!if p;	1.28 If the post is already read
#!if p.file;	1.28 If there is any attached file(s)
#!if p.viewlock;	1.28 If the post is 'View Locked'
#!if p.remail;	1.28 If the post is setup with an automatic reply
#!if p.notice;	1.28 If the post is appointed as a notice
#!if p.var[0];	1.28 If the 0 th additional variable value of the board is entered
#!if p.var[n];	1.28 If the n th additional variable value of the board is entered; n is the number between 0~25

Condition of the “#!if;”syntax for branching compare the simple compound numbers condition.

#!if u.lv<1 b.viewlock;
<td> password</td>
<td><input name=passwd type=password size=8 class=input style="background:F4F9FF"> </td>
#!fi;

Upper HTML is the some example of the board’s edit filter to configure the password of the post if configure the view lock in board or guset user

2.3 HTML SHELL

As the contents to structure the web screen increases, the architecture of web service is getting complicated. For the convenient of work, web browser supports frame set, iFrame and others, and

web server supports combination technique of HTML documents, so called SSI (Server Side Include). Segio supports the combination technique of HTML documents by web filtration and supports "HTML SHELL" of new concept.

A. Frame Architecture

Frame separates the screen of web browser logically, and displays HTML documents with different URL on each of separated sections. For complicated homepages, there are parts which are called repeatedly by various web services like top menu or bottom menu. It will have administration cost if each section is managed in separate file.

Multiple Frame Architecture

To maintain a HTML document which is divided according to function, multiple frame structure is possible. About top menu, bottom menu and content part, separate the HTML document, make the various frames and display the different URL's HTML document in each frames. Below is an example of multiple frame architecture.

```
<HTML>
<HEAD>
<TITLE>Welcome to Segio Homepage.</TITLE>
<frameset rows="120,*,80" border="0">
  <frame name="MENU" scrolling="no" src="menu.html">
  <frame name="BODY" scrolling="no" src="body.html">
  <frame name="BOT" scrolling="auto" src="bottom.html">
</frameset>
<noframe>
</noframe>
</HTML>
```

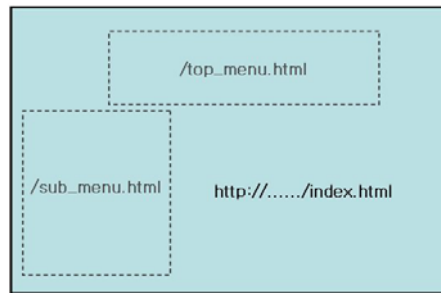
Once the web browser finishes loading the above HTML document, it divides the screen as below (In actual web browser, borders of divided sections are invisible).



Each frame constructs the entire screen after receiving HTML documents from different URLs. It does look like a single document however the construction may get dispersed as scroll bars may be created for each frame.

Single Frame and SSI

By using SSI function of the server, it does not divide the frame of web browser logically and implement non-scattering web service. SSI is a technique to combine various documents into HTML document then transfer. Image below shows this single frame architecture using SSI.



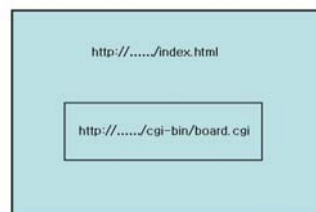
Web server consolidates HTML documents including "top_menu.html" and "sub_menu.html" into one then transfer.

Introducing iFrame

When modification of web application programmed using CGI etc. and HTML document is difficult, iFrame can be used. Below is an example of using iFrame.

```
<iframe name=brd width=500 height=450 src="http://sm.kseek.com/cgi-bin/board.cgi"></iframe>
```

Unlike general frames, iFrame divides the screen in box format with certain size in HTML document, and displays the HTML document received from separate URL.



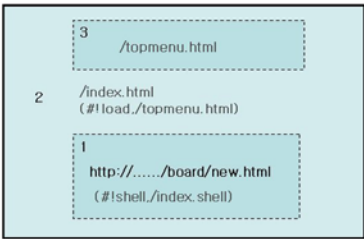
If it is necessary, iFrame adjusts scroll bar or border line to be not seen so it looks like a single document.

HTML SHELL

HTML shell is simplified compared to SSI by combining HTML document through web filtering. Below image shows an example of HTML shell.



Unlike SSI, which inserts supporting HTML document into original HTML document, HTML shell combines documents by inserting original HTML document denoted by URL in between the supporting HTML document. HTML document is called "Core document" and supporting HTML document as "Shell document." Image below shows the relationship of combining Shell document with HTML document then upper menu with shell document. Numbers show the combining order of HTML document.



In the upper image, only No. 1 document receive the URL. In filtering process of step 1, No. 2 is operated as the shell document and in the filtering process of the No. 2 shell document, it include the No. 3 document.

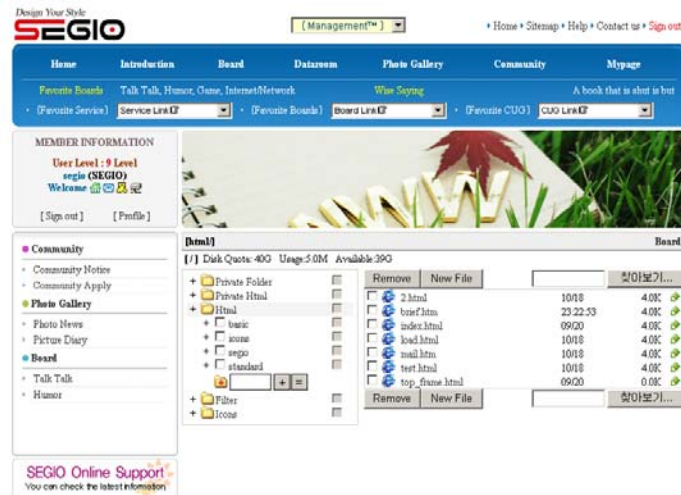
B. HTML Shell

HTML shell is saved in the name with “*.shell” format in HTML document area of IntraCell. The MIME configuration of file of “shell” extension must be determined as “text/html” from

Segio Management Tool to allow editing using the test editor like HTML documents. Below is the core document (Left) and HTML shell (Right) displayed on web browser independently.



Left image is executed result of CGI provided by server as directory management service. Two documents are combined to a HTML document as below by "#!shell..." syntax.



HTML shell decorates not only general HTML documents but also the outer part of CGI script execution result. Shell document must indicate a diverging point of a document as below.

#![];  shell document recognizes this sign to be the diverging point and inserts the core document

If there is no indication when inserting core document, the core document will be placed on very end of the document.

Default Shell

"Index.shell" of directory where core document is located is called a default shell. If variable is not appointed to "#!shell,...;" syntax default shell automatically operates. It is applied differently in boards, CGI etc. Below is a summary of default shell depending on core document.

Class	URI example	Default shell	Remark
Normal HTML document	/index.html	/index.shell	
	/sub_cont/main.html	/sub_cont/index.shell	
	/~toto/in/ddd.html	/~toto/in/index.shell	
PHP Script	/index.php	/index.shell	Same as the HTML document
	/sub_cont/main.php	/sub_cont/index.shell	
Bulletin board	/notice.brd	/index.shell	
	/~summerb/note.brd	/~summerb/index.shell	
	/@game/fr.brd	/@game/index.shell	
CGI Binary	/cgi-bin/time/schedul	/index.shell	
	/cgi-bin/messenger/memo	/index.shell	

Specified Shell

Specified shell is a shell specified by "#!shell,...;" syntax from core document.

Example 1) #!shell,main.shell;
Example 2) #!shell,main;  "main.shell" or "main/index.shell"
Example 3) #!shell,..../main;  "..../main/index.shell"
Example 4) #!shell/;  "/index.shell"

Once the directory name is specified, the default shell of the directory is recognized as specified shell. Below is an example of shell specification in CGI.

Format) printf("Content-type: text/html\n\n"); After this use "#!SHELL;" syntax in content
1) printf("Content-type: text/html\n\n#!shell;");  Inheritance jacket is in action
2) printf("Content-type: text/html\n\n#!shell/cgi;");  cgi.shell jackets are in action

Below explains how to specify the relative URI.

URL: http://sm.kseek.com/intra/community/board.html
#!shell,ddd;  html/intra/comunity/ddd.shell
#!shell,..../ddd;  html/intra/ddd.shell
#!shell,..../ddd;  html/ddd.shell
#!shell,~sysop/  html/~sysop/index.shell
#!shell,@game/  html/@game/index.shell

Calling Shell

Calling shell is a shell called by URL and has higher priority than specified shell and default shell.

`<a href=/home/dodo.html?shell=/main.shell>`

Below is an example of the calling shell from CGI script and board.

<code>http://sm.kseek.com/cgi-bin/test.cgi?shell=/cgi</code>	<code>1.28</code>	Shell specification in CGI
<code>http://sm.kseek.com/notice.brd?shell=/main</code>	<code>1.28</code>	Shell specification in board

Calling shell renders specified shell powerless from the core document as below.

<code>http://sm.kseek.com/cgi-bin/t.cgi?no=1&shell=none</code>	<code>1.28</code>	Cancel shell specification in CGI
<code>http://sm.kseek.com/notice.brd?shell=none</code>	<code>1.28</code>	Cancel shell specification in board

Inheritance Shell

In representative HTML document, if inheritance is decided to a certain HTML shell then inheritance shell is in action as long as HTML document does not use specified shell. Inheritance shell displays an equal sign (=) in front of the name when assigning specified shell and calling shell as below.

<code>#!shell,/main.shell;</code>	<code>1.28</code>	Sets inheritance shell when URL called
1) <code><a href=/home/dodo.html?shell=/main.shell</code>	<code>1.28</code>	Sets inheritance shell when URL called
2) <code><a href=/notice.brd?shell==/main.shell</code>	<code>1.28</code>	Sets inheritance shell when URL called

HTML shell has priority in following order.

Calling shell, Addressing shell, Inheritance shell, Default shell, Default shell of main URL

In list, view, edit filter, `#!shell;` syntax can be used but only operated in position display. In the case of using calling shell, `#!shell;` syntax of the specified shell also shows the position of the shell effect.

C. Shell Template and Location

Image below shows the contents of two documents assembled by `"#!shell...;"` syntax. The first image corresponds to URL and calls the second number to the shell.

1. http://...../game/char.html

```
#!/shell./;
.....
<table ><tr><td>
<img src=image/note.gif>
</td></tr>
.....
</table>
```

2. /index.shell

```
.....
.....
<table ><tr><td colspan=2>
<img src=headline.gif>
</td></tr>
.....
</table>
```

Number 1 and 2 are combined together and transferred to the web browser. Web browser loads data file by requesting URL for other contents included in HTML document based on number 1 URL. Image links indicated above request images to URL summarized in below.

1) image/note.gif	↳ http://sm.kseek.com/game/image/note.gif
2) headline.gif	↳ http://sm.kseek.com/game/headline.gif
□ BASE URL: "http://sm.kseek.com/game/char.html"	

If the URL of core document of number 1 is http://sm.kseek.com/note.html, then shell document of number 2 requests image(s) to following URL.

headline.gif	↳ http://sm.kseek.com/headline.gif
□ BASE URL: "http://sm.kseek.com/note.html"	

Image linked to the shell document (number 2) is interpreted as other URL as we had a look earlier. If the image is linked by relative URI it may cause some confusion and therefore image link must be done by absolute URI to minimize the chaos.

1. http://...../game/char.html

```
#!/shell./;
.....
<table ><tr><td>
<img src=image/note.gif>
</td></tr>
.....
</table>
```

2. /index.shell

```
.....
.....
<table ><tr><td colspan=2>
<img src=/headline.gif>
</td></tr>
.....
</table>
```

As in right image, if an image is specified by absolute URI, it displays one image no matter which document it is combined with. If the absolute URI is applied to image or URL connection method, you can make the web design structure becomes more like templates and there are more

parts to be modified when repeatedly used in Group and personal spaces. "#!l...;" syntax is used to solve these problems.

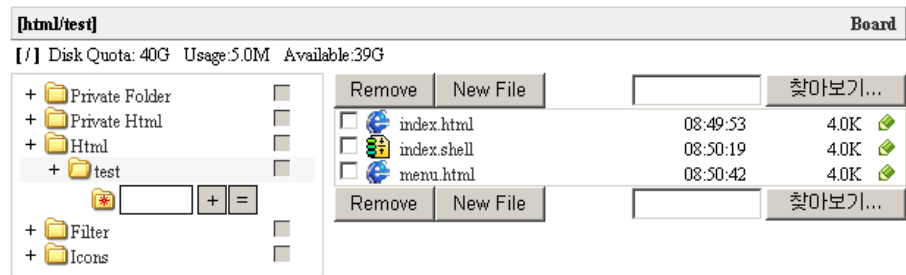
- 1) #!l;  Displays the location home of HTML document being filtered currently
E.g.)

2) #!l.base;  Displays the same directory of HTML document being filtered currently
Eg)

Web Daemon checks through the user authority related to the document location whenever combining the documents. If the shell document is designed using "#!l...;" syntax, it can be copied to Group, personal homepages etc. and used as it is. The shell template can be developed like this.

D. HTML sell operation example

Web documents composed the web service are managed by the web administration tool. If you use it, you can create direcotry, upload the data file and write the new HTML document. Web service is offered by making a lot of HTML documents and using the method of shell or load.



Below is the original content of “index.html” in the upper management tool.

```
<title>Html testing</title>
<body>
#!shell,=index;
This is index.html Document
<table width=300 border=1 bgcolor=white>
<tr> <td> this is test table</td>
</tr></table>
```

Below is the original content of “index.shell” in the upper management tool.

```

<style>
td, th, textarea, body, div { font-size:11pt }
a { text-decoration:no }
</style>
<table border=3 cellspacing=0 cellpadding=0 bgcolor=#A0C0FF width=600>
<tr>
  <td colspan=2 valign=top height=40> this is index.shell </td>
</tr><tr>
  <td bgcolor=#A0FFC0 valign=top height=120>#!load,menu.html;</td>
  <td bgcolor=yellow valign=top>#![];</td>
</tr>
</table>

```

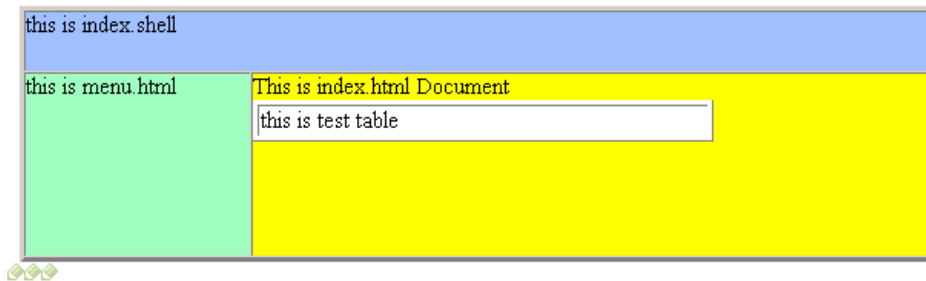
Below is the original content of “menu.html” in the upper management tool.

```

<div>
this is menu.html
</div>

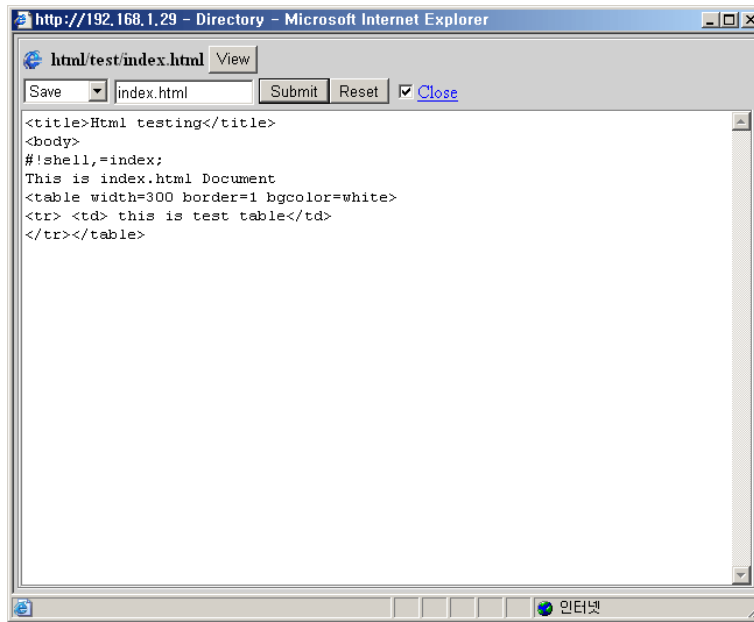
```

Upper 3 documents are displayed like below after being combined.



Direct edition function (Edit on View)

For syntaxes such as "#!shell;" and "#!load;", number of files are used to display one screen. We introduce the direct edition function(edit-on-view) to clear the discomfort that find the combined HTML document in the web administration tool one by one and edit the available document on service. On the bottom left-hand side there is an icon projected as a shape of five pencils. It means that this document is associated with 3 editable documents. When mouse is over this image, an URI appears and editor tool as below appears when clicked.



When 'Submit' is clicked after editing, data is transferred to the server then editor tool disappears, and the page refreshes to show the changes. If you de-select the 'Close' option then click 'Submit', editor window does will not disappear but the page refreshes to update and show the changes.

In case of having the edit right of partly HTML document as like that take the shell document of the IntraCell area in HTML document of the personal area, web server support the edit on view only about HTML document having the right of edit.

2.4 CGI/PHP Extension

CGI is provided for common use in all IntraCells. On the other hand, PHP can be used independently for each IntraCell. CGI must be installed by Segio Administrator to be used in IntraCell and PHP can be installed and used by IntraCell Administrator.

A. CGI Binary

CGI is located in "/etc/shttpd/cgi-bin/" directory and can be used in IntraCell. CGI is executed as an independent processor and is able to access to all areas of the server, therefore it does not support to include separate CGI for each IntraCell.

Below explains the reaction of the web server according to the calling of the CGI.

URL) <http://sm.kseek.com/cgi-bin/test.cgi>

Transfer the result of the execution of /etc/shttpd/cgi-bin/test.cgi to web browser.

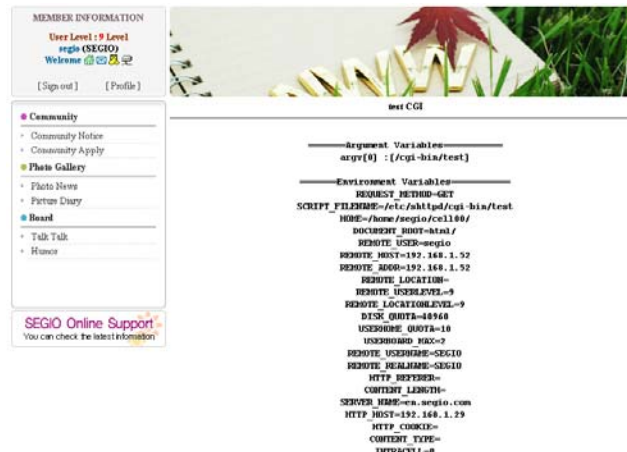
Execution by URL Call

Execution by URL Call is the general CGI call method. In previous explanation, CGI has the specified URL address and if the web browser requests the URL, web server transfers the result of the execution.

Below is the original copy of CGI implemented simply in C language.

```
#include <stdio.h>
#include <stdlib.h>
extern char **environ;
int main(int argc, char *argv[])
{
    int i,re;
    char **s;
    printf("Content-type: text/html; charset=UTF-8\n\n");
    printf("#!SHELL;"); //shell is called.
    printf("<b>test CGI<hr><pre>");
    printf("\n=====Argument Variables=====\\n");
    for(i=0;i<argc;i++)printf("argv[%d] :[%s]\\n",i,argv[i]);
    printf("\n=====Environment Variables=====\\n");
    for(s=environ;*s;s++)printf("%s\\n",*s); //Prints off all environmental variables
}
```

By compiling above source file to get execution result as below.



MEMBER INFORMATION

User Level: 9 Level
segio (SEGIO)
Welcome

[Sign out] [Profile]

Community

- Community Notice
- Community Apply

Photo Gallery

- Photo News
- Picture Diary

Board

- Talk Talk
- Humor

SEGIO Online Support
You can check the latest information!

test CGI

```
=====Argument Variables=====
argv[0] :/cgi-bin/test

=====Environment Variables=====
REQUEST_METHOD=GET
SCRIPT_FILENAME=/etc/shttpd/cgi-bin/test
HOME=/home/segio/coll00/
DOCUMENT_ROOT=/atah/
REMOTE_USER=segio
REMOTE_HOST=192.168.1.52
REMOTE_ADDR=192.168.1.52
REMOTE_LOCATION=
REMOTE_USERLEVEL=9
REMOTE_LOCATIONLEVEL=9
DISC_QUOTA=4940
USERHOME_QUOTA=10
USERHOMED_MAX=2
REMOTE_USERHOME=SEGIO
REMOTE_REALNAME=SEGIO
HTTP_REFERER=
CONTENT_LENGTH=
SERVER_NAME=ca.segio.com
HTTP_HOST=192.168.1.29
HTTP_COOKIE=
CONTENT_TYPE=
HTTPCELL=0
```

Web Daemon calls CGI binary and delivers various kinds of information in environmental variable format. CGI receives much information as below.

REQUEST_METHOD	1.28 Requested method, returns the value of either 'GET' or 'POST'.
SCRIPT_FILENAME	1.28 CGI script name
HOME	1.28 Executed home directory
DOCUMENT_ROOT	1.28 Location of HTML documents
REMOTE_USER	1.28 User ID
REMOTE_HOST	1.28 Access point of user (IP address)
REMOTE_ADDR	1.28 Access address of user(Domain name address or IP address)
REMOTE_LOCATION	1.28 User location -> In case of inline execution, having /, /~summer/, /@game/ etc.
REMOTE_USERLEVEL	1.28 User level
REMOTE_LOCATIONLEVEL	1.28 Level at access point(Level in Group, Personal space)
DISK_QUOTA	1.28 Disk quota of IntraCell
USERHOME_QUOTA	1.28 Disk quota of user
USERBOARD_MAX	1.28 Maximum number of boards of user
REMOTE_USERNAME	1.28 Username
REMOTE_REALNAME	1.28 User's real name
HTTP_REFERER	1.28 Referrer (Linked location of URL)
CONTENT_LENGTH	1.28 Content length (Content length of uploaded data when POST)
SERVER_NAME	1.28 Default hostname for IntraCell (Used for mail address combination)
HTTP_HOST	1.28 Hostname user connected
HTTP_COOKIE	1.28 User's cookie
CONTENT_TYPE	1.28 Contents features

HTML Inline Execution

Execution by URL call play take the form that web browser request the URL of calling CGI, but HTML inline execution is the method of inserting the result of the execution after being executed by the web filtering script in HTML document. "#!load,...;" syntax combines the documents if the "Content-type" of CGI binary execution result is "text/html." Below is an example of CGI execution by inline call.

```
<body bgcolor=white>
Calling test CGI into inline<br>
<table bgcolor=#b0b0ff><tr><td style='padding:10 20 40 80;border-width:1;'>
#!load,/cgi-bin/test?call=allvariable;
</td></tr></table>
```

HTML code above gets filtered to form a web screen as below.

Calling test CGI into inline

```
test CGI

=====Argument Variables=====
argv[0] :[/cgi-bin/test]

=====Environment Variables=====
QUERY_STRING=call=allvariable
REQUEST_METHOD=GET
SCRIPT_FILENAME=/etc/shttpd/cgi-bin/test
HOME=/home/segio/cell00/
DOCUMENT_ROOT=html/
REMOTE_USER=segio
REMOTE_HOST=192.168.1.52
REMOTE_ADDR=192.168.1.52
REMOTE_LOCATION=
REMOTE_USERLEVEL=9
REMOTE_LOCATIONLEVEL=9
DISK_QUOTA=40960
USERHOME_QUOTA=10
USERBOARD_MAX=2
REMOTE_USERNAME=SEGIO
REMOTE_REALNAME=SEGIO
HTTP_REFERER=
CONTENT_LENGTH=
SERVER_NAME=en.segio.com
HTTP_HOST=192.168.1.29
HTTP_COOKIE=
CONTENT_TYPE=
INTRACELL=0
```

In the case that CGI is executed by the HTML inline call, environment variable assigned as “QUERY_STRING” has the appointed value in “#!/load,...;” syntax.

B. PHP

Segio uses UTF-8 as default character set therefore database must support UTF-8 as well. Segio Web Daemon processes web filtering after running PHP on HTML documents with "*.php" and "*.php4" format. Upper area of the directory where PHP documents are located is not accessible.

PHP information display

PHP setup values can be confirmed by doing below, as for Apache.

```
<? phpinfo(); ?>
```

PHP document including above contents is shown as below.



System	Linux en.segio.com 2.6.9-11.19AX #1 Fri Aug 5 05:12:07 EDT 2005 i686
Build Date	Nov 17 2004 22:26:56
Configure Command	'./configure'
Server API	CGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/usr/local/lib
PHP API	20020918
PHP Extension	20020429
Zend Extension	20021010
Debug Build	no
Thread Safety	disabled
Registered PHP Streams	php, http, ftp

This program makes use of the Zend Scripting Language Engine:
Zend Engine v1.3.0, Copyright (c) 1998-2004 Zend Technologies



If you locate PHP script containing above syntaxes in web directory, it may lead to security problems.

Variable name	Remark
REQUEST_METHOD	Server requesting method(ex) GET or POST)
HOME	Home directory of IntraCell
DOCUMENT_ROOT	Home directory of HTML document
REMOTE_USER	User ID
REMOTE_HOST	Hostname of requested user
REMOTE_ADDR	IP of requested user
REMOTE_USERLEVEL	User Level(ex) 0 ~ 9)
REMOTE_LOCATIONLEVEL	Level in location (Group, user space)
DISK_QUOTA	Maximum capacity for each user
USERHOME_QUOTA	Home directory capacity of user
USERBOARD_MAX	Maximum number of boards allowed for each user
REMOTE_USERNAME	User's nickname
REMOTE_REALNAME	User's real name
SERVER_NAME	Server name
HTTP_HOST	Domain name of corresponding IntraCell
INTRACELL	Number of the IntraCell

Values of above environmental variables can be checked using the code below.

```
<? system("env"); ?>
```

Authorization sharing

User not logged in is given level 0 and logged users are given level 1 or higher and therefore authentication is easily taken care of using the level. Below is a simple example to process the authentication using "REMOTE_USERLEVEL".

```
<? if($REMOTE_USERLEVEL > 0)
{
    echo "Logged in.<br>";
    echo $REMOTE_USERNAME ."Welcome.";
} else {
    echo "Please log in.";
}
?>
```

Process can be done easier without separate authentication process using the value of environmental variables apart from REMOTE_USERLEVEL, REMOTE_USER(User ID), REMOTE_USERNAME(User nickname), REMOTE_REALNAME(User's real name) and others.

Shell Template Application

When construction a HTML document with a single frame and if the following codes are inserted to application programmed with PHP, template can be applied effectively without having the work to insert HTML into PHP code.

- | | |
|--------------------------------|--|
| 1. echo "#!SHELL,="; | 1. When applying the inheritance shell |
| 2. echo "#!SHELL,/"; | 2. When applying the default shell |
| 3. echo "#!SHELL,/main.shell"; | 3. When applying the addressing shell |

Below show the example of shell application to PHP code.

```
<?
echo  "#!shell,=";

/*****
* 공통 파일 include
*****/
include "_head.php";

/*****
* 게시판 설정 체크
*****/
```

Below is the shell application to the Zeroboard coded in PHP. It there is the case that open PHP program do not support the UTF-8 character set, has the General open PHP program do not often support the UTF-8 character set, there is the possibility to occur the problem. Therefore, it is needed to convert to UTF-8 character set



Database Association

For MySQL 4.1 or higher version, all storage data is saved as Unicode (UTF-8). Therefore for web applications and database data used at lower version (Lower version than MySQL4.1), modification process of data to Unicode is required. Below is an example to access DB using PHP.

```
<?
$conn=mysql_pconnect("localhost", "segio", "segio");
if(!$conn) { echo "Mysql Connect Fail"; }
else      { echo "Mysql Connect Ok"; }
?>
```

Segio adopts UTF-8 as its default character set. For compatibility, specify the character set of MySQL as "UTF8", as shown below.

```
ex) mysql_query("SET NAMES UTF8" , $conn);
```

Access Control to Upper Directory

When several IntraCells are operated in one server, access to upper directory is controlled in PHP to prevent the interruption between IntraCells.

```
<?
include("lib/lib.php");    // Under operation
include("../inc/inc.php"); // Error occurs because of the access to upper directory
echo "PHP Testing.....";
?>
```

An error message "Failed opening '../inc/inc.php' for inclusion" appears upon the execution of the second function.

Others

If Apache and PHP are installed in form of compiled source, PHP of Segio may not work properly. It is because of the difference between the configuration file and library, therefore remove them first then re-install them.

Chapter 3 Bulletin Boards

Bulletin board supports open type web filtration for easy application of multimedia and liberally structures web pages by applying web filtration about 3 phase functions of post listing, post editing and post browsing. It can also be easily combined with normal HTML documents.

3.1 Board Administration

General boards, Group boards and user boards are classified according to the features by each URI and created and administrated by same method. Therefore users with good administration ability of user boards or homepage can also manage Group or intranet well.

Bulletin Boards

Boards are called in URL form of virtual file and this is classified into a specific directory which is a subdirectory of IntraCell directory.

<code>http://sm.kseek.com/notice.brd</code>  <code>board/notice/</code> (notice is the directory name)

Group Boards

Group boards can be used independently in Group area. URL is expressed using the Group ID and board ID combined together as below.

<code>http://sm.kseek.com/@game/note.brd</code>  <code>group/game/board/note/</code>
--

A group can operate up to certain number of boards specified by IntraCell.

Personal Boards

Personal boards can be used in user space independently. Intranet Administrator specifies the maximum number of boards for each user and user can create boards up to specified number depending on the level.

<code>http://sm.kseek.com/~sysop/friend.brd</code>  <code>home/s/sysop/board/friend/</code>
--

A. Board Management Tool

Segio has the function of board basically in web daemon and support the management tool for installation, deletion and configuration of board.

Below is the example of the management tool.

Board Admin [0]

[New Board | 13]

	NO.	ID	Name	Read Permission	Write Permission	Shell	Owner	posts	Data
☐	01	cug_notice	Community No -	-U 0	-U 0			000	16K
☐	02	cug_request	Community Ap -	-U 0	-U 0			000	16K
☐	03	game	Game	-U 0	-U 0			000	16K
☐	04	help	Help	-U 0	-U 0			000	12K
☐	05	humor	Humor	-U 0	-U 0			000	16K
☐	06	internet	Internet/Net -	-U 0	-U 0			000	16K
☐	07	issue	Issue	-U 0	-U 0			000	16K
☐	08	master	Master Mail	-U 9	-U 0			000	12K
☐	09	news	News	-U 0	-U 0			000	16K
☐	10	notice	Notice	-U 0	-- 0			004	16K
☐	11	photo_news	Photo News	-U 0	-U 0			000	16K
☐	12	pic_diary	Picture Diar -	-U 0	-U 0			002	848K
☐	13	talk	Talk Talk	-U 0	-U 0			000	16K

Remove

◀ 01 ▶

Cell: 20/25

Board management tool as above is given to IntraCell Administrator, Group Administrator and Personal users equally. As show in the image, it indicates the information of the items as like board number, ID, name, read permission, write permission, HTML shell, owner, posts, data quota and etc. If you click the subject, you can align the each itme and and support the page preparing for riching the boards. Like the below method, you can link the board management tool to HTML document.

```
#!if u.lv==9;  
<a href="#!href.admin.board,">Board management</a>  
#!fi;
```

The link method of Management tool for group and user board are explained in sentence 2 and 3 of chapter 4.

Creating New Board

From image above, if you click "NewBoard" menu then a pop-up window for creating new board appears. Board ID and the configuration of new board must be specified in the pop-up window(referring to “board_rc.html” filter in sentence 3 of chapter 4). Make sure that board ID is not duplicate of existing ID and it must be shorter than 16 characters using English characters, numbers, underscore (_) and minus (-).

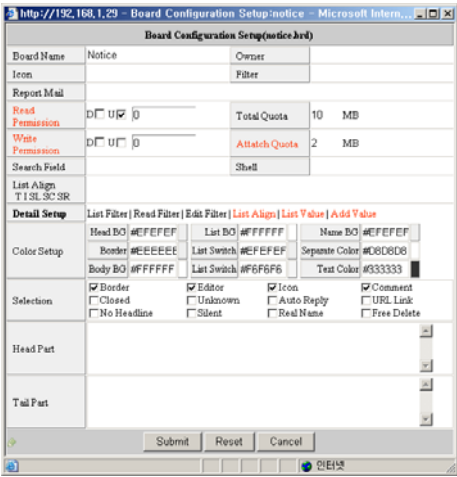
Deleting a Board

From image above, select the checkbox left to the post list then click "Remove" button to delete after confirmation. Once a board is deleted, data cannot be restored.

B. Board Configuration

Board configuration can be called from either board list or board administration menu. Items deleted and not specified with any values are applied as board related setup value for intranet

configuration. If it does not support modification in configuration, it maintains the existing setup value. Below is the board configuration page.



Authority Configuration

Various authorities for boards are decided upon the level. Authority level can be entered with series of numbers from 1 to 9. D stands for 'Dedicate' and it means authority is given to all levels. If not selected users with the first level or higher are given the authority. Authority is decided upon user level if ‘U’ is selected and upon location level if ‘U’ is not selected. In general area of intranet, user level and location level are identical.

Level Configuration	Authority Configuration	Remark
DU 237	Permission in case that user level is 2, 3 and 7	
-U 3	Permission in case that user level is 3,4,5,6,7,8 and 9(over first level)	
D- 458	Permission in case that user level is 4,5 and 8	
-- 623	Permission in case that user level is 6,7,8 and 9(over first level)	

List Style

It decided which items to be displayed from board list. Below explains how to specify the list style.

1. Each <td>~</td> value are divided by a colon (":"). LIST_TD1: LIST_TD2:
2. Specific value of each td cell is divided by a slash (/) with the following order.
 Aligned item/Headline name/Width(Pixel)/Word length restriction.
 * If there is no value for each item, enter a series of slashes (/).
3. E.g) "NO/Post number:WRITER/Author:TITLE/Title of the post:DATE/Date written:READ/Number of hits";
 Default:"NO/No:WRITER/Writer:TITLE/Title:DATE/Date:READ/Read"

List style uses field signs below in the same method as in "#!brief;" syntax which is for inserting some part of the list to HTML document. Default values indicated here.

Field sign	Width significance	Length restriction	Alignment	Details	Remark
no	15		center	Number	
title	100	30		Title	
uid	40		center	User ID	
uname	30		center	User name	
writer	50		center	Author	Name (ID)
read	15		center	Number of hits	
url	50	30		Homepage address	
date	30		center	Date posted	
mail	50	30		Email address	
file	15		center	Attached file	
Fname	50	14	Center	Attached file name	
thumb	40		center	Image file thumbnail	
shortcut	* List is constructed by the image + subject + part of content				
imagecut	* List is constructed by mainly the image and supplement information				

Field information displayed in list is signed by “<td>~</td>” syntax. Each “<td>” cell is assigned by the total width proportional to the sum of the all selected field. Real value of the width weight can’t be over the 128 and fix the subject weight as 100 and set the rest relatively.

If the “shortcut” and “imagecut” is located at the first line in style construction, board list is constructed by accompanying the image. Below is the example of the usage of “shortcut”.

Items included in board list are given the width depending on the significance. It is applied by the percentage calculated by the total of significance.

<pre>#!brief,notice,style=shortcut//100;</pre> 1.5P image size of the notice board in brief list (100x100)
--

“shortcut” and “imagecut” is set the “style” item like below.

Variable Format : shortcut/[type]/[img width]/[title length]/[context length]/[alignment]; EX) #!brief,notice,style=shortcut//80/50/250/right; 1.5P image size of the notice board in brief list (80x80) 1.5P context length 250 characters, subject length 50 characters

Search Field Configuration

"#!b.querybox;" syntax displays a query box for retrieval of posts from board list. Query box has two parts; search field selection part (the selectable items are adjustable) and part where you enter the keyword. Among the field signs introduced earlier, using the field sign of searchable fields (except no, thumb etc) specification is done as below.

Format) Field sign1/field name1:Field sign2/field name 2:....

Example 1) all/all:title/title:file/file name

1.29" Use specified name directly

Example 2) title:all:file:uname

1.29" Use defined name from language dictionary

Default value when not entered is set as "all:title:context:file:writer".

Basic information of the board

Next is the summarization of the basic information of the board.

Basic Item	Details	Remark
Board name	Bulletin board name	
Administrator	Specified board owner (multiple owners can be assigned by the space)	Master summer
Representative Icon	Assign the representation icon, if it is empty, inherit intranet or location	
Filter	Assign the representation name of the read filter, edit filter, list filter	
Board Quota	Maximum allowed quota of board data (MB)	
Post Quota	Maximum allowed upload quota for a post(MB)	
Shell	Assign the fixed shell document	
Head Part	HTML document displayed in head part of the board	#!b.head;
Tail Part	HTML document displayed in tail part of the board	#!b.tail;

Board Selection

Board has the configuration following selective items as on/off type. Below is the explanation when the selected item is “on”.

http://192.168.1.29 - Board Configuration Setup(notice.brd) - Microsoft Intern...

Board Configuration Setup(notice.brd)			
Board Name	Notice	Owner	
Icon		Filter	
Report Mail			
Read Permission	☒ U ☒ 0	Total Quota	10 MB
Write Permission	☒ U ☒ 0	Attach Quota	2 MB
Search Field		Shell	
List Align	T 1 SL SC SR		
Detail Setup			
Head BG	#EFEFEF	List BG	#FFFFFF
Border	#EEEEEE	List Switch	#EFEFEF
Body BG	#FFFFFF	List Switch	#F6F6F6
Name BG	#EFEFEF	Separate Color	#D8D8D8
		Text Color	#333333
Selection	☒ Border ☐ Closed ☐ No Headline	☒ Editor ☐ Unknown ☐ Silent	☒ Icon ☐ Auto Reply ☐ Real Name ☐ Comment ☐ URL Link ☐ Free Delete
Head Part			
Tail Part			
Submit Reset Cancel			

Selective Items	Details	Remark
Border	Sign the rank of the list border in list view	border
Editor	Using the DHTML editor(connected to edit filter)	editor
Icon	Sign the basic title icon in title line	ticon
Comment	Allow the comment	words
Closed	Support the view lock	Viewlock
Unknown	Do not report the user id and name when post.	nobody
Auto Reply	If post reply, it is transferred to email automatically	remail
URL Link	When the URL input, it is linked to the icon in title line.	go2url
No Headline	Do not display the title line in the list	noheadline
Silent	If post, upload it as deleted state(Administrator can restore it.)	silent
Real Name	User name is written in Real Name	realname
Free delete	Anyone who has read permission can delete the post	rmfree

List Filter, Read Filter, Edit Filter

Above filter set, it can be operated if there exists the fixed filter which is written by the intracell administrator. In case of group or user board, each filter can be written in board configuration directly for effective use. When input the filter in board configuration, if start “!”, the operation postpone. Assigned filter in configuration, do not support the direct edit function.

List configuration

There are configuration items about list table in list view.

List Value: Decide the detail attribute of list table.

Title Height	0	List Height	0	List per page	0
Page Menu	0	Top Padding	0	Side Padding	0
Border Thickness	0				

Below is the each items in list configuration.

Items	Details	Example	Remark
Title Height	<tr> height of the title field line of the board list	25	#!b.headsize;
List Height	<tr> height of the general post list	22	#!b.listsize;
List per page	Number of posts in one list	15	#!b.listlen;
Page Menu	Number of page menu	10	#!b.pagelen;
Top Padding	Padding-top value in list's“<td>~</td>”	1	#!b.toppad;
Side Padding	Padding-left, right value in list's “<td>~</td>”	4	#!b.sidepad;
Border Thickness	Barriercolor of the title and list line is displayed	1	#!b.barrier;

If the each item's value is assigned 0, default value is operated.

C. Linking the Board

Newly created boards can be used since it is linked from board management tool automatically however it should be linked to public HTML document otherwise those without administration authority cannot use it. Boards can be linked easily to HTML document since it is displayed in virtual file format such as "*.brd".

Linking through an Absolute Path

All boards can be linked to the web page with simple URI format as below.

Classification	Bulletin board ID	Link format	Remark
General	/notice	Notice	
Group	/@game/notice	Notice	
User	/~summer/note	Note	

Linking through an absolute path is the most perfect method however it may be complicated to link boards in Group and personal spaces. Especially when you are trying to adopt template functions for similarly designed structures, the absolute path should be changed every time and this may cause heaps of inconvenience.

Linking through a Relative Path

Relative Path is the calculated path from calling web document's URL to the relative position URL. Below is a linking method through URI of relative path form.

Document location	Link method	URI connected	Remark
http://.../note.html	Notice	/notice.brd	
http://.../~sum/note.html	Notice 	/~sum/notice.brd	
http://.../@game/note.html	Notice	/@game/notice.brd	
http://.../my/note.html	Notice	/my/notice.brd	Error

Even if you use the same board linking method, boards are linked with different URI depending on the location of the link. In the last example, board does not work at all.

Using Location Home

Linking boards to HTML documents through an absolute path only is followed by much inconvenience. When you are making a Group template, it must be modified to fit every Group. To overcome this problem, the concept of location home was introduced.

Document location	Location home	Remark
http://.../note/index.html	/	Normal homepage
http://.../~sum/note/index.html	/~sum/	Personal home
http://.../~sum/note/sub/index.html	/~sum/	Personal home
http://.../@game/index.html	/@game/	Group home

Location home is indicated on HTML document by "#!;" syntax. Connecting method by location home is applied to images and other data files.

* Link method in HTML documents. Notice	
* It links to different URIs depending on the HTML document.	
1. /intranet/menu.html	 Notice
2. /intranet/home/view.html	 Notice
3. /@game/intra/menu/g.html	 Notice
4. /~sysop/menu.html	 Notice

If you use the concept of location home as above, it is possible to link board to the correct location for all documents linking the board.

3.2 Board Filter

Boards structure a web page by Edit Filter (editfilter), View Filter (viewfilter) and List Filter (listfilter) for three main functions of editing, viewing and listing posts respectively. Default filters which can be used commonly in all boards are as follows.

Filtering function	Basic filter	Remark
Edit filter	filter/post_edit.html	
View filter	filter/post_view.html	
List filter	filter/post_list.html	

Seperate filter can be assigned in each board. If separate filter is specified from configuration, board searches for filter file with specified name from "view/", "edit/" and "list/" directories under "filter/". If file exists it is substituted and if there exists no file default filter automatically goes in action.

E.g.) filter specification : test	
	If the document 'filter/edit/test.html' exists, works as an edit filter.
	If the document 'filter/list/test.html' exists, works as a list filter.
	If the document 'filter/view/test.html' exists, works as a view filter.
- If there is no filter, default filter come into action.	
- The contents of filter can be directly edited and entered from board configuration.	

A. Writing Edit Filter

Edit filter construct the web interface related to post edit which is one of the major functions of the board. It is used not only to edit the new post, but also to modify the existed post. Therefore, in "<input>", "<textare>~</textarea>" area, it must include the initialization area as the previous input data.

Edit filter judges the conditions of configuration and allow using DHTML Editor. "`#!/if b.editor;`" statement decides whether "Editor" is selected from board configuration. Default WYSIWYG Editor is located in `"/icons/editor/"`, the URI of shared web resources. Each cell can use the other editor. "`filter/post_edit.html`" file is the default edit filter and below is the summarization of the major part of the edit filter. (* In effect, it include the various tag as like "`<table>`", "`<tr>`" and "`<td>`".)

```
<head>
<title> #!b.name read post</title>
</head>
<body>
#!/shell;

#!/b.head;
<iframe src="about:blank" height=0 width=0 frameborder=0 name="action_target"></iframe>

<form method=post enctype=multipart/form-data name=editform target=action_target>
#!/IF l.lv<2;
Writer * <input name=uname value="#!p.name;">
Email: <input name=email value="#!p.email;">
Homepage: <input name=url value="#!p.url;">
#!/fi;

Title: <input name=title value="#!p.title;">

#!/if p.file; file selection: #!p.filecheck; #!fi;

#!/if b.pquota;
<!---### OnServer file browsing area ---->
Attatch File: <input type=file name=file class=input > Quota : #!b.pquota; MB
#!/fi;
#!/if b.vlock || l.lv<2; Password <input name=passwd type=password size=8 class=input> #!fi;
<input type=hidden name=ctype value=";">
#!/if b.vlock;Closed <input type=checkbox name=VIEWLOCK value=on #!p.vlock;> #!fi;
#!/if b.remail; Reply Mail <input type=checkbox name=REMAIL value=on > #!fi;

<textarea name=context >#!p.context;</textarea>
<input type=submit name=done value=submit >
<input type=reset name=cancel value=reset >
#!/b.tail;
<!------- Put Java script which calls the DHTML Editor here ----->
```

Please be careful about followings when you write or modify the edit filter.

- Make sure the structure of `<form>` filter is correct.
- Make sure you understand conditional statements of `#!/if..;` format then describe.
- Insert script which loads DHTML Editor.
- Install `<iframe>`
- Capital letter and lowercases are distinctive -> Closely connected to Java script

"<form ...>" tag is written to transfer edited data to web server and "action" is not specified. "name" was specified as "editform" and this is closely related to Java script. "<iframe>" works as an object frame of <form> statement which induces posting.

Calling DHTML Editor

Below is designed to call in DHTML Editor with Editor's URI ("/icons/editor/") in Java script as its starting point. DHTML Editor is not supported by some browsers.

```
#!if b.editor;
<script language="Javascript1.2">
<!-- // load htmlarea
_editor_url = "/icons/editor/"; // URL to htmlarea files
var win_ie_ver = parseFloat(navigator.appVersion.split("MSIE")[1]);
if (navigator.userAgent.indexOf('Mac') >= 0) { win_ie_ver = 0; }
if (navigator.userAgent.indexOf('Windows CE') >= 0) { win_ie_ver = 0; }
if (navigator.userAgent.indexOf('Opera') >= 0) { win_ie_ver = 0; }
if (win_ie_ver >= 5.5) {
    document.write('<scr' + 'ipt src="' + _editor_url + 'editor.js"');
    document.write(' language="Javascript1.2"></scr' + 'ipt>');
} else {
    if(document.editform.context.value=="")
        document.editform.ctype.value='text/plain';
    document.write('<scr'+ 'ipt>function editor_generate() { return false; } </scr'+ 'ipt>');
}
// --></script>

<script language="javascript1.2">
editor_generate('context');
</script>
#!else;
<script>
if(document.editform.context.value=="")
    document.editform.ctype.value='text/plain';
</script>
#!fi;
```

Java script is specified as a name variable "editform" in <form> tag, "ctype" item is specified by <input> tag and it allows editing contents in "context" item. If this element is changed Java script does not work.

File upload section

SEGIO board is designed to include up to 40 data files. Data file of post is distinguished into attach file which is uploaded by selecting the file and inline file which is included in the post. File upload section make the file selected and uploaded as the attach file. You can upload the number of files if you assign the type and name of the "<input>" tag as the "file".

```

    #!if b.file;
    <input type=file name=file style=width:99%;" class=input >
    <input type=file name=file style=width:99%;" class=input >
    <input type=file name=file style=width:99%;" class=input >
    #!fi;

```

In case of above, all boards can attach the file up to 3. You can construct as below to select one file once and increase files when you need. “#!if b.file;” ~ “#!fi;” show the file selection window when the configuration allow the file upload.

```

    #!if b.file;
    <table width=100% cellspacing=0 cellpadding=0><tr>
    <td id=filefield width=80%>
    <input type=file name=file style=width:99%;" class=input ></td>
    <td><input type=button value=' + ' OnClick="plus_filefield(this.form)" ></td>
    <td>용량:#!b.pquota;MB</td></tr></table>
    #!fi;

```

“#!if b.file;” syntax show it when the file attachment option is selected. You can use the javascript that user can upload the number of attach file that he want in the limited number of file upload.

The Java script below adjusts the number of attached file.

```

<script>
function plus_filefield(form)
{
    count=form.count.value;
    if(count>5)return false; // add the file selection window up to 5
    count++;
    form.count.value=count;
    str = '<br><input type=file name=file style=width:99%>';
    document.all.filefield.innerHTML+=str;
    return false;
}
</script>

```

File selection section

Edit filter use not only in writing the new post but also modifying the existed post. In the case of modifying the existed file, you can position as below to select the adding or deleting the attach file.

```

    #!if p.file;
    <tr height=25px>
    <td width=15% bgcolor="#d0d0FF" class=cell4name>File selection</td>
    <td colspan=3 width=85% class=cell4input>#!@#p.filecheck;
    </td></tr>
    #!fi;

```

If there is the attach file, “`#if p.file;~”#!fi;`” section will be operated. Therefore, it will not be operated if write the new post or modify the post that has no attach file.

View Lock

View Lock is a function which requires the authentication for a post to read using the password. The locked posts are shown on the list but cannot be read without an authentication process.

User can use View Lock selectively if board allows View Lock mechanism using “`#if b.viewlock;~ #!fi;`” statement.

```
#!if b.viewlock; View Lock:
<input type=checkbox name=viewlock value=on #!if p.viewlock; checked #!fi;>#!fi;
```

“viewlock”, a common reserved of `#!b;` and `#!p;`, has following difference in meanings.

<code>#!if b.viewlock;</code>	<code>☞</code> If board allows the post to select view lock...
<code>#!if p.viewlock;</code>	<code>☞</code> If the post is view-locked...

If it is configured to support view lock, the edit filter should allow setting view lock to the post. If you release the view lock option from board configuration after a post is view-locked, view lock of existing posts are not cancelled.

Password Input Part

The author of a post has authority to edit or delete and this is done by investigating user ID. For guests who are not registered users to set view lock, a password is required to edit, delete or view lock authentication.

```
#!if b.viewlock || u.lv<1;
  <input type=password name=passwd value='#!p.passwd;' style=width:30>#!fi;
#!if b.viewlock;
  <input type=checkbox name=VIEWLOCK value=on #!if p.viewlock;checked#!fi;>
  &nbsp;  </td>#!fi;
```

Conditional statements of filter are OR operators and asks for a password if view lock is used on board or user level satisfies the condition of guest level.

Entering Name

If NOBODY is configured for board, user name or user ID is not recorded no matter who wrote the post. For boards where guest can write a post or where Nobody option is configured, name can be entered as below.

```
#!if b.nobody || u.lv<1; <input name=uname value='#!p.name;' style=width:30>#!fi;
```

If the board Administrator enters a name it is specified as a name of the post, not user ID.

```
#!if b.owner; <input name=uname value='#!p.name;' style=width:30>#!fi;
```

It is useful when submitting a post under a specific department rather than a personal user. In the area of the Intranet, group and user, assigned webmaster has no right to manage the board.

Email Address and Homepage

When a post contains a URL, go2url may be selected for you to link the URL from the list, and for guests to enter email address and homepage.

```
#!if b.go2url || u.lv<1;  
electronic mail: <input name=email value="#!@#P.email;"><br>  
Homepage: <input name=url value="#!@#P.url;"><br>  
#!fi;
```

Automatic Reply

Below is an option on automatic reply. Automatic reply function sends off a comment written on a post if the author has registered an email address.

```
#!if b.remail;Automatic reply:  
<input type=checkbox name=reply value=on #!if p.remail; checked #!fi;>#!fi;
```

Automatic Reply can be configured from both board and post and has following difference in meaning.

```
#!if b.remail; 1. If it was configured to allow Automatic Reply configuration in posts  
#!if p.remail; 2. If the post has Automatic Reply function configured
```

Notice Posts

Below is a part where authorized administrator is able to specify notice(s).

```
#!if b.owner; Notice  
<input type=checkbox #!if p.notice;checked#!fi; name=notice value=on> #!fi;
```

"#!if b.owner;" judges if the user has board administration authority. Board Administrator can select notice option. The branching statement "#!if p.notice;" finds out whether the existing posts were selected as notices to make sure the value does not change when editing notice posts.

Notice is the function to rank the post on the top always. To support notice function, select notice function item from configuration and also you must check that it is a notice post when you are writing one. Up to 5 posts can be ranked as notices.

Notice

SEGIO WEB SOLUTION
BACK

Registered Article:05 Now:01/01Pages

No	File	Title	Writer	Date	Read
005	 Hello!		SEGIO(segio)	10/19	01
004	 Hello!		SEGIO(segio)	10/19	01
003	Statistics function is add ~		SEGIO(segio)	10/19	00
002	SEGIO Promotion Tour 2005 ~		SEGIO(segio)	10/19	00
001	English template basic des ~		SEGIO(segio)	10/19	00

<< 01 >>

LISTWRITE

All

SEARCH

There are two notices from general list. If you submit a new post one goes down and aligned as it should be but the other one remains on the top list.

ServerFile browsing

Install the next to select and uplod the saving file to user’s myfolder and HTML directory.

```
<input type=hidden name=onfile value="">
<tr><td><a href=# onclick="#!popup,onfile," >ServerFile</a></td><td id=serverfile> </td>
```

User’s myfolder and webfoler is used to manage apart the data file received by webmail. SeverFile is usefull to select attatch file of the post or webmail. “<form>” tag’s name must be “editform” for SeverFile browsing.

B. Writing View Filter

View Filter organizes a page to read a post. To allow writing additive comments to the post, <form>~</form> statements must be included. Below is the summarizing of the view filter.

```

<head>
<title> #!b.name Read Post</title>
</head>
<body>
#!shell;
<iframe name='action_target' width=0 height=0 frameborder=0></iframe>
#!b.head;
<table>
<tr><td>Title</td><td colspan=3>#!p.title; </td></tr>
<tr><td>Writer</td><td>#!p.uname;(!p.uid;)</td> <td>Hit</td><td>#!p.read;</td></tr>
<tr><td>Date</td><td>#!p.date; #!p.time; </td>
    <td>No</td><td>#!b.postno;#!b.posts;</td></tr>
</table>
<table>
<tr><td width=70% align=left>#!p.art_up,[ ▲ Next];</td></tr>
<tr><td width=70% align=left>#!p.art_dn,[ ▼ Prev];</td></tr>
</table>
<!-- ##### Menu part of the view filter ### --!>
<table width="100%">
#!if p.email; <tr><td >&nbsp;&nbsp;&nbsp;&[Email]:</td><td width=80% >#!p.email;</td></tr> #!fi;
#!if p.url;    <tr><td >&nbsp;&nbsp;&nbsp;&[Homepage]:</td><td>#!p.url;</td></tr> #!fi;
#!if p.file; <tr><td>&nbsp;&nbsp;&nbsp;&[Attatch file]:</td><td>#!p.file;</td></tr> #!fi;
</table>
<!-- ### Check the plug-in for attached file(s) Plug-in check for attached file ### --!>
<table width="100%" cellpadding="20"><tr><td>#!p.context;</td></tr></table>

<!-- ##### Read filter page menu part ### --!>
<!-- ##### Comment attached display and Enter part ### --!>
#!b.tail;

```

Basic information of the post (title, author, number of hits, date written, number etc.) is displayed. Previous and next post are linked and additional information such as email, homepage and attached file is displayed only when applicable using "#!if p.*; ~ #!fi" syntax.

In using the DHTML editor in edit filter, when you hit the enter, "<P>...</P>" syntax make the one paragraph. To protect the line widening, insert below in the style or document.

```
P {margin-top:0px;margin-bottom:0px; }
```

Comment display and input

Comment is a function to express a short opinion of the reader of a post. Install the "<form>~</form>"syntax and "<iframe>"syntax for writing the comment when read the post. Comment also recognizes users and provides input/erase functions.

```

<table width=100% cellpadding=0 cellspacing=0 border=0>
  <tr><td>#!p.words;</td></tr>
</table>

#!if b.words;
<table border=0 cellpadding=2 cellspacing=0 width=100% >
<form method=post Name="gtext" target=action_target>
  <tr>
    <td> <b> Write a comment </b>
    #!if u.lv<1; Name <input name=UNAME style=border-style:inset;border-width:1px; value="">
      Password <input name=passwd type=password style=border-style:inset;border-width:1px;><br>
    #!fi;

    <textarea name=WORDS style="width:100%; height:50pt;" class="comment"></textarea></td>
    <td><input type=submit name=ok value="Submit" class=button></td>
  </tr>
</form></table>
#!fi;

```

Comparative syntax "#!if b.words;" was used to allow writing comments only when attached comment value set 'true' from board configuration. Also, people with level lower than level 1 are mostly guests and in this case, the name and a password must be entered.

View Filter Menu Part

View filter is in charge of structuring web page for posts to be read. User may want to print the contents, write a comment or either delete or modify. These options are displayed by using reserved words in "#!p.m_*;" format. It operates with "v_*.gif" format board icon directory. Below is an example of view filter menu part.

```

<table width=100%>
<tr><td>#!p.m_print; #!p.m_reply; #!p.m_move; #!p.m_del;#!p.m_edit;</td>
  <td align="right"> #!p.m_down; #!p.m_list; #!p.m_up;</td></tr>
</table>

```

Data File Plug-in

If there is any data files it is possible to obtain by retrieving file name of the attached file. To utilize plug-in of attached file it must be used with Java script. Below is an example which is implemented to allow playing flash file or movie clips while you are reading the posts.

Attachment File Image Display

If there are several image files attached to a post and if you want to express all of them on web page, you can use Java script as below.

```
<script>
function image_resize(img,w,h){ // Adjust only when size is bigger than specification
    alt = "Size: "+ img.width + " X " + img.height;
    if(img.width>w) {img.alt=alt; img.width =w; img.height=(img.height*w)/img.width; }
    if(img.height>h){img.alt=alt; img.height=h; img.width =(img.width*h)/img.height; }
} // Original size is indicated for adjusted images.
function image_view(img){
    if(img.length<5)return; // 4 characters including extension is inefficient.
    str = "<img src='"+img+"' border=0 onLoad='javascript:image_resize(this,640,1000);'>";
    document.write(str + "<br><br>"); // Once it is loaded, re-size the image.
}
</script>
```

Introduced function executes image display function when file name of the image is efficient and automatic re-sizing function and is called as below.

```
<script>
image_view("#!p.furi[0], 'gif jpg png'");
image_view("#!p.furi[1], 'gif jpg png'");
image_view("#!p.furi[2], 'gif jpg png'");
image_view("#!p.furi[3], 'gif jpg png'");
image_view("#!p.furi[4], 'gif jpg png'");
image_view("#!p.furi[5], 'gif jpg png'"); // Display up to 6 images.
</script>
```

C. Writing List Filter

List Filter structure a list page of posts. To delete or to move the selected post, "<iframe>" must be installed including "<form>~</form>" statements.

```

<!-- ##### Java script ##### -->
<title>#!b.name; List View </title><bdo> #!shell;
#!b.head;
<table width="100%">
<form method=post enctype=multipart/form-data name=listform target=action_target>
<tr><td>#!b.m_refat,FAT;#!b.m_setup,SETUP; </td>
<td align=right> Registered Article:<font color=red><b>#!b.posts;</b></font>&nbsp;
Now:#!b.pageno;#!b.pages; Pages &nbsp;#!b.owner;</td></tr>
<tr><td colspan=2 bgcolor=#666666 height=2></td></tr>
</table>

#!b.list; <!-- List display part --->

<table width=100% border=0>
<tr><td align="center" width=100% bgcolor="#e5e5e5">#!b.pagemenu;</td></tr>
<tr><td align="center">
<table width=100%>
<tr> <td width="8">
</td>
<td width="100%"> #!b.m_remove,Remove;#!b.m_undel,Undel;</td>
<td width="100%">#!b.m_list,List;#!b.m_post,Write;</td>
<td width="8">
</td></tr>
</table>
</td></tr>
</table>

<table width=100% border=0 cellpadding=0 cellspacing=0>
<tr><td align="center" height="35" width=100%>&nbsp;#!b.querybox,12;#!b.m_seek;
</td></tr>
</table>

#!b.tail;
</form>
</center>
<iframe name=action_target width=0 height=0 frameborder=0></iframe>

```

Below javascript must be included in the list view. Among the functions, “reverse_check”, “_thumbnail_view” and etc are included because they are the binary call function and “_resize” is the function which is called in the “_thumbnail_view”. If you have an administration authority you can see checkboxes on the left of the post list. If you select the first checkbox for the first time, the selection is getting converted, and if you select the first checkbox for the second time, all selections are cancelled. This part was implemented by Java script as below. #!shell; only display the position that assigned filter operate in.

```

<script language="JavaScript">
function reverse_check(tform) {
    var i,j;
    var checked=tform.reverse_ck.checked;
    for(i=1,j=tform.elements.length;i<j;i++){
        var ele=tform.elements[i];
        if(ele.name=="normal_ck")    ele.checked = checked?!ele.checked:checked;
    }
    return;
}

function _resize(img,width,height)
{
    if(img.width>width){
        img.height=(img.height*width) / img.width;
        img.width=width;
    }
    if(img.height>height){
        img.width =(img.width * height) / img.height;
        img.height=height;
    }
    return;
}

function _thumbnail_view( iurl, width, height,align)
{
    str "<img src='"+iurl+"?thumbnail' width='"+width+"'";
    if(align.length>0) str +="(" align='"+align+"'";
    str+(" border=0 onLoad=\"_resize(this,'"+width+"','"+height+"');\">");
    document.write(str);
    return ;
}
}
</script>

```

"reverse_ck" is displayed automatically in very front of the headline of the post list. "normal_ck" is automatically created on the left hand side of each post. Therefore in boards with option "noHeadLine" checked, a separate checkbox must be entered as below.

```

<input type=checkbox class=checkbox name=reverse_ck
onClick=javascript:reverse_check(this.form);>

```

“_thumbnail_view” is function that display the thumb item in the list or thumbnail image included the post for showing the type of the imagecut, shortcut and etc. Because thumbnail image is saved as up to 200x200 size, after upload the image, it call the “_resize” to adjust the image size.

D. Writing Authentication Filter

Below is a summary of authentication filter ("auth_check.html").

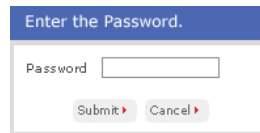
```

<script>
function return_path(tform)
{
    ele=tform.referer;
    if(ele)document.location.replace(ele.value);
    else alert("No return_path");
}
</script>

<iframe frameborder=0 height=0 width=0 name="action_target0"></iframe>
<form target=action_target0 method=post enctype='multipart/form-data' name=auth_form>
Authorization Needed<br>
PassWord <input name=passwd value="" size=8><br>
<input type=hidden name=referer value="#!l.referer;">
<input type=submit value="#!word,submit;" name=send>
<input type=button value=Cancel onclick="return_path(this.form);">

```

The authentication filter prepares an authentication web page to be used when reading a locked post or deleting a post locked with a password. Image below shows a page for authentication.



After going through the authentication process once, no further authentication is required when bringing a file attached to a post or editing a post.

3.3 Board Style

Boards support 3 exclusive filters to structure main web pages including viewing, writing and listing. Various styles can be implemented through icons used for boards or through configuration.

A. Board Icons

Board icons is used in the webmail, board and etc and image file is transferred as like below.

```

http://sm.kseek.com/icons/kr/l_post.gif
1.29 If there is the "html/icons/kr/l_post.gif" in the intracell, the file is transferred.
1.29 If there is shared web resource "/etc/shttpd/icons/kr/l_post.gif" file, the file is transferred.

```

The shared web resource, "/etc/shttpd/icons/" has the board icons as below.

/etc/shttpd/icons/	default/	1.28	Default board icons
	kr/	1.28	Korean board icons (Default)
	kr01/	1.28	1 set of board icons expressed in Korean
		1.28	Many icon directories exist with different numbers
	en/	1.28	English board icons (Default)
	en01/	1.28	English board icons
		1.28	Many icon directories exist with different numbers
	jp/	1.28	Japanese board icons (Default)
	jp01/	1.28	Japanese board icons
		1.28	Many icon directories exist with different numbers
* The actual icon set directory may vary depending on the distribution version.			
* Among the lower directories, "file/" and "editor/" are not board icons			

Board icons can be specified in configuration of intranet, configuration of Group and personal environment and board configuration. Board icons are made up of image files of below kinds.

l_*.gif	1.28	List icon, mainly used from the board list
t_*.gif	1.28	Title icon, used with the title of the list and viewing posts
v_*.gif	1.28	View icon, used for viewing and editing posts
m_*.gif	1.28	Icon used in screens including list, view, compose of web mail

List Icons

List icons have name of "l_*.gif" format and there are following kinds. Abbreviated words are recommended words to be included when making icons.

File name	Abbreviated word	Functional Details	Remark
l_first.gif	First	To the first list	
l_last.gif	Last	To the last list	
l_list.gif	List	To the list	
l_merge.gif	Merge	Merge posts	
l_move.gif	Move	Move a post	
l_next.gif	Next	Next list page	
l_next_.gif	Next	Next list page (inactive)	
l_null.gif	-	Transparent icon with the size 1x1	
l_post.gif	Write	Write a post	
l_pre.gif	Previous	Previous list page	
l_pre_.gif	Previous	Previous list page (inactive)	
l_refat.gif	Inspection	List restoration function	
l_remove.gif	Delete	Delete	
l_seek.gif	Find	Find (Search)	
l_setup.gif	Configuration	Configure	
l_undel.gif	Restore	Restore (Cancel delete)	
l_copy.gif	Copy	Copy the moving post to the memory	
l_paste.gif	Paste	Paste copying post to the board	
m_getaddr.gif	Address book	Bring address book	
m_go2top.gif	Go to Top	To the top of the web mail address book	

Title Icons

Icons of "t_*.gif" format are quoted in front and the rear of the title from the list. One is displayed according to the post features and board configuration and the other is displayed depending on the head of the post.

Icon name	Abbreviated word	Functional Details	Location
t_go2url.gif		Go to the web address directly	Rear
t_icon.gif		Title icon (default)	Front(Configuration)
t_new.gif		Display the posts within 1 day	Rear
t_notice.gif		Notice posting	Front
t_reply.gif		Reply post display icon	Front
t_viewlock.gif		Display the locked posts	Rear

Below are the icons displayed according to the head of the post.

Icon name	Initial to be replaced	Icon name	Initial to be replaced
t_00.gif	[0]	t_08.gif	[8]
t_01.gif	[1]	t_09.gif	[9]
t_02.gif	[2]	t_alt.gif	[@]
t_03.gif	[3]	t_minus.gif	[-]
t_04.gif	[4]	t_plus.gif	[+]
t_05.gif	[5]	t_sharp.gif	[#]
t_06.gif	[6]	t_space.gif	[]
t_07.gif	[7]	t_star.gif	[*]

Title icons are displayed with the title therefore it must be made within certain size. The recommended size is 40 pixels or less for the width and 16 pixels or less for the height.

View Icons

For icons displayed in view filter and write filter of the board there are following kinds. Underlined icon means that it is inactive. When displaying delete icon, an active icon (v_del.gif) is displayed if you have the authority and otherwise it displays a gray inactive icon (v_del_.gif).

Icon name	Abbreviated word	Functional Details	Remark
v_back.gif	Previous	Move to previous page	
v_del.gif	Delete	Delete the post	
v_del_.gif	Delete	Delete the post (inactive)	
v_down.gif	Down	Previous post	
v_down_.gif	Down	Previous post (inactive)	
v_edit.gif	Modify(or Edit)	Edit the post	
v_edit_.gif	Modify(or Edit)	Edit the post (inactive)	
v_forward.gif	Forward	Send the post by mail	
v_list.gif	List	Go to the list	
v_move.gif	Move	Move	
v_move_.gif	Move	Move (inactive)	
v_print.gif	Print	Print	
v_reply.gif	Reply	Reply (Board, web mail)	
v_reply_.gif	Reply	Reply (inactive)	
v_rmpadd.gif		Delete comment	
v_add2book.gif	Save address	Save the mail address to address book	
v_save2disk.gif	Save	Save the mail/board's file to disk	

Below images are examples of board icons based on Korean and Japanese respectively.

Talk Talk(talk.html)

Title	Wow, it is fantastic!!!		
Writer	user	Read	03
Date	2005/10/28 20:40:29	No	05 / 05

[▲ NEXT] :
[▼ PREV] : Wow, it is fantastic!!!

Wow, it is fantastic!!!

[▲ NEXT] :
[▼ PREV] : Wow, it is fantastic!!!

Talk Talk(talk.html)

Title	Wow, it is fantastic!!!		
Writer	user	Read	04
Date	2005/10/28 20:40:29	No	05 / 05

[▲ NEXT] :
[▼ PREV] : Wow, it is fantastic!!!

Wow, it is fantastic!!!

[▲ NEXT] :
[▼ PREV] : Wow, it is fantastic!!!

Some view icons and list icons ("l_*.gif") may duplicate in names and shapes. If the specification of the view icons and list icons are similar you can use one of duplicating files and modify the file name.

B. Board Configuration Filter

Screen for board configuration is provided only to the owner and implemented by "board_rc.html" file of standard filter. This part is a bit complicated so the first time users just refer to this by modifying some parts of it only.

http://192.168.1.29 - Board Configuration Setup:talk - Microsoft Inter...

Board Configuration Setup(talk.html)						
Board Name	Talk Talk	Owner				
Icon		Filter				
Report Mail						
Read Permission	D ☐ U ☒ 0	Total Quota	10 MB			
Write Permission	D ☐ U ☒ 0	Attach Quota	2 MB			
Search Field	Shell					
List Align	T I S L S C S R					
Detail Setup	List Filter Read Filter Edit Filter List Align List Value Add Value					
Color Setup	Head BG	#EFEFEF	List BG	#FFFFFF	Name BG	#EFEFEF
	Border	#EEEEEE	List Switch	#EFEFEF	Separate Color	#D8D8D8
	Body BG	#FFFFFF	List Switch	#F6F6F6	Text Color	#333333
Selection	☐ Border ☐ Editor ☐ Icon ☐ Comment ☒ Closed ☒ Unknown ☐ Auto Reply ☐ URL Link ☐ No Headline ☐ Silent ☐ Real Name ☐ Free Delete					
Head Part						
Tail Part						
Submit Reset Cancel						

완료 인터넷

Image is an example to help better understanding and actually "board_rc.html" file may change therefore it may be different in appearance.

Configuration Headline

Below is the headline part of configuration filter. It is summarized due to the total length.

```
<title> Bulletin board configuration </title>
### Style and script ###
<body onload="self.focus();" leftmargin=0 topmargin=0 marginwidth=0 marginheight=0>
<table border=0 cellspacing=1>
<form method=POST enctype=multipart/form-data target=action_target name=brcform>
  <tr bgcolor="#CCCCCC"><th height=27 colspan=4 class=outset1>
    #!if b.id;
      <b> Bulletin board configuration (#!b.uri);</b>
    #!else;
      New Board id: <input name=new-board-id style=width:80;border-style:groove;>
    #!fi;
  </td> </tr>
```

Configuration always appears as a pop-up window and once the setup is done it disappears. If you use several boards, configuration window may be left open therefore insert "onload='self.focus();'" syntax into "<body>" tag to place the pop-up window on top every time it is refreshed.

"#!if b.id;" syntax is used for board ID input when configuration is about creating new board. Below is the headline of the new board when it gets created.

New Board id:

When you create a new board, ID of the new board is additionally specified along with environmental variables. For configuration of the new board, please refer to the board configuration, the last part.

Basic Configuration

Below is a summary of the basic configuration part.

```
<tr><td>Board Name</td> <td><input name=name value="#!b.name;"></td>
  <td>Owner</td> <td><input name=owner value="#!b.owner;"></td></tr>
<tr><td>Icon</td> <td><input name=icon value="#!b.icon;"></td>
  <td>Filter</td> <td><input name=filter value="#!b.filter;"></td></tr>
<tr><td>Report Mail</td> <td colspan=3><input name=report value="#!b.report;"></td></tr>
<tr><td>Read Permission</td> <td><!--#### Read Permission ---!></td>
  <td>Total Quota</td> <td><input name=bquota value="#!b.bquota;">MB</td></tr>
<tr><td>Write Permission</td> <td><!--#### Write Permission ---!></td>
<td>Attatch Quota</td> <td><input name=pquota value="#!b.pquota;">MB</td></tr>
```

Read Authority and Write Authority in default configuration is quite complicated and explained separately.

Configuration items	Input Name	data calling	Details
Board name	Name	#!/b.name;	Bulletin board name
Administrator	Owner	#!/b.owner;	Specified board owner
Representative icon	Icon	#!/b.icon;	Board icon
FilterSet	filter	#!/b.filter;	Specified board filter
Report Mail	Report	#!/b.report;	Board report mail address
Board quota	bquota	#!/b.bquota;	Maximum allowed quota of board data (MB)
Post quota	pquota	#!/b.pquota;	Maximum allowed upload quota for a post(MB)

When you enter the email address to the report mail, the new post transfer to the email whenever new post is uploaded to the board.

The number of email address separated by space can be entered and supported up to 128 english characters. If you remain empty and start with “!” character, then report mail do not oprate.

Read Authority Configuration Part

Board authorities are specified according to the level and these are Read Authority and Write Authority. Each level authority configuration part is structured as below with two switches and one input part.

```
<input name=flag_perm_rd value='OFF' type=hidden>
<input name=flag_perm_ru value='OFF' type=hidden>
&nbsp;D <input name=flag_perm_rd value='ON' #!if b.perm_rd:checked#!fi; type=checkbox>
&nbsp;U <input name=flag_perm_ru value='ON' #!if b.perm_ru:checked#!fi; type=checkbox>
&nbsp;&nbsp;<input name=perm_r maxsize=8 value='#!/b.perm_r;'>
```

Switch-type configuration using checkbox of web browser transfers value of selected item only and not the values of unselected items. Therefore to change the default value, install the input tag which has hidden property and set the value as "OFF". The value of checkbox-type input tag should be "ON" later and "checked" must be displayed using "#!if;" syntax. Below shows three input items used for configuring the Read Authority.

Input name	Details	Remark
flag_perm_rd	Whether the specified level(d:Dedicate) is applied to Read (r) level	on/off
flag_perm_ru	Whether the user level (u:User) is applied to Read (r) level	on/off
perm_r	Read level character set	0123456789

D options lets you choose if it is processed with specified rank and if it is not selected it is processed as comparative rank. U option decides whether the judgment should be made based on user level or location level.

Write Authority Configuration Part

Write Authority configuration part is very similar to the one of Read Authority configuration part. Below is a summary of level configuration part for writing.

```
<input name=flag_perm_wd value='OFF' type=hidden>
<input name=flag_perm_wu value='OFF' type=hidden>
&nbsp;   D <input name=flag_perm_wd value='ON' #!if b.perm_wd;checked#!fi; type=checkbox>
&nbsp;   U <input name=flag_perm_wu value='ON' #!if b.perm_wu;checked#!fi; type=checkbox>
&nbsp;   &nbsp;  <input name=perm_w maxsize=8 value='#!b.perm_w;'>
```

Each input tag has below meanings.

Input name	Details	Remark
flag_perm_wd	Whether the specified level (d:Dedicate) is applied to Write (w) level	on/off
flag_perm_wu	Whether the user level (u:User) is applied to Write (w) level	on/off
perm_w	Write level character set	0123456789

Operation method depending on selection and input value is similar as for Read level.

Configuration for Web Environment Structure

Below is a configuration part for web environment structure.

```
<tr>
<td class=cell4name>Search field</td>      <td><input name='class' value="#!b.field;"></td>
<td class=cell4name>HTMLshell</td>      <td><input name='shell' value="#!b.shell;"></td>
</tr>
<tr><td class=cell4name>List style</td>      <td><input name=style value="#!b.style;"></td>
</tr>
<!-- List variable, Color configuration, on/off switch, Additional variables --->
<tr><td class=cell4name>Head decoration</td>
  <td colspan=3><textarea name='head'>#!b.head;</textarea></td></tr>
<tr><td class=cell4name>Tail decoration</td>
  <td colspan=3><textarea name='tail'>#!b.tail;</textarea></td></tr>
<tr bgcolor=#CCCCCC><td colspan=4 align=center>
<input type=submit name=done value=" Submit "><input type=reset name=reset value=" Reset ">
<input type=button name=close value=" Cancel" onClick=JavaScript:window.close();>
</td></tr></form></table>
<iframe src="about:blank" frameborder=0 height=0 width=0 name="action_target">
</iframe>
```

For data transfer to web server and safe conversion, add "iframe" named "action_target" at the last part. Below is the style specification part omitted from the content. If you are familiar with HTML, understanding these style functions must be easy.

Configuration Item	Input Name	Calling data	Details
Retrieval field	Field	#!/b.field;	Enter field to be displayed in query box
HTMLshell	Shell	#!/b.shell;	Specify HTML SHELL document
List style	Style	#!/b.style;	Set up the items to be displayed on board list
Head decoration	Head	#!/b.head;	Web design structure of upper part of board
Tail decoration	Tail	#!/b.tail;	Web design structure of upper part of board

Calling method of specified data is used to initializes input window of configuration page and to utilize specified data from exclusive filter at the same time.

Style Definition Part

Web page can be structured by specifying style and by doing this the amount of HTML is reduced a lot. Below is an example of style definition part.

```
<style>
body, td, th { font-size:10pt; }
textarea, input, div { font-size:9pt; }
A {text-decoration:none;color:#000000;}
P {margin-top:0px;margin-bottom:0px; }

.headline{border-style:outset;border-width:1px;}
.inputtd{border-style:inset;border-width:1px;padding:'0 1 0 1';}
.input60{border-style:none;border-width:0px;width:50px;}
.input {border-style:none;border-width:0;width:100%;}
.inputlv{width:80;border-style:inset;border-width:1px; }
.input_d{border-style:none;width:20px;border-width:0px;}
.subname{border-style:outset;border-width:1px;padding:0,1,0,1;background-color:#F0F0F0;font-size:9pt;text-align:right}
.none{border-style:none;border-width:0;}
.checkbox { width:15px;height:15px; }
.cell4name { border-style:outset; border-width:1px; padding:1,7,1,7; background-color:#EEEEEE;}
.cell4input{ border-bottom-style:solid;border-bottom-width:1;padding:0px;}
.color_td { border-style:solid;border-width:1px;background-color:white;}
.color_input {style=border-style:none;border-width:0px;width:58;}
.color_box {width:10px;border-style:outset;border-width:1px; }
.color_int { width:2px;border-style:none; }
.subtable {border-style:outset;border-width:3px; background-color:white;border-color:black;}

</style>
```

CSS style specification code introduced above is useful when structuring a web page for the board configuration. Board configuration contains huge amount of items to be configured therefore by applying Style, consistent web design is possible later on. Below is the example of the using style.

```

<tr>
  <td width='18%' class=cell4name>Icon</td>
  <td width='32%' class=cell4input><input class=input name=icon value="#!b.icon;"></td>
  <td width='18%' class=cell4name>Filter</td>
  <td width='32%' class=cell4input><input class=input name=filter value="#!b.filter;"></td>
</tr>

```

Java script

Java script helps implementing more flexibly configured interface. Java scrip below allows color selection using the mouse.

```

<script>
function get_brdcolor(name)
{
  var newcolor, hin, vname, view,oldcolor;
  hin=document.all[name]; vname='v'+name; view=document.all[vname]; oldcolor=hin.value;
  url="/icons/editor/popups/select_color.html"; //Using the color selection of the share resource
  newcolor=showModalDialog(url, oldcolor ,"resizable: no; help:no; status:no; scroll:no;");
  if(newcolor==null)return;
  newcolor='#'+newcolor;
  view.style.backgroundColor=newcolor;
  hin.value=newcolor;
  return false;
}

function set_brdcolor(col,vname){
  view=document.all[vname];
  if(view)view.style.backgroundColor=col.value;
}

function switch_visible(obj)
{
  if(vis==obj){ obj.visibility='hidden'; vis=null; return;}
  if(obj.visibility!='visible'){
    if(vis!=null)vis.visibility='hidden';
    obj.visibility='visible';
    vis=obj;
  }
}
</script>

```

"get_boardcolor()" function is implemented with a dialogue of HTML document which contains color table and allows color selection. "set_boardcolor()" function expresses the color change automatically when color value is entered into the field or modified.

“switch_visible();”function is configured that “<div>~</div>” area is not visible. Separate part that not using often in the board configuration and make invisible by “<div>~</div>” syntax.

List Variable Configuration

List variable is the section which adjust the title line height, list height, border thickness between title title line and list line and etc. Below is the screen of list variable configuration.

List Value: Decide the detail attribute of list table.

Title Height		List Height		List per page	
Page Menu		Top Padding		Side Padding	
Border Thickness					

Below is a summary of HTML implemented to adjust the detailed set values from the list value.

```
<style> .input20 { border-style:none;width:20px;border-width:0px; } </style>
<table border=0 cellpadding=0 cellspacing=0><tr>
<td>Title Height</td> <td><input name=headsize value="#!b.headsize;"></td>
<td>List Height</td> <td><input name=listsize value="#!b.listsize;"></td>
<td>List per page</td><td><input name=listlen value="#!b.listlen;" ></td>
<td>Page Menu</td> <td><input name=pagelen value="#!b.pagelen;" ></td>
<td>Top Padding</td><td><input name=toppad value="#!b.toppad;" ></td>
<td>Side Padding</td> <td><input name=sidepad value="#!b.sidepad;" ></td>
<td>Border Thickness</td> <td><input name=barrier value="#!b.barrier;" ></td>
</tr></table>
```

Input argument names used in each <input> tag specifies characteristics as table below.

Input argument name	Details	Remark
HeadSize	Height of the list title <tr height=...>	#!b.headsize;
ListSize	Height of the post list <tr height=...>	#!b.listsize;
ListLen	Number of post list displayed per page	#!b.listlen;
PageLen	Number of page menu displayed per page	#!b.pagelen;
TopPad	Top margin from board list cell	#!b.toppad;
SidePad	Side margin from board list cell	#!b.sidepad;
Barrier	Barrier thickness of list title and the list of board	#!b.barrier;

Above values are automatically applied from board list display.

Color Configuration Part

For color configuration, when color is entered using keyboard the chosen color can be checked on the right hand side. This function is accomplished by "set_boardcolor()". If you click the View

Color cell with the mouse, a window appears for you to choose a color. When a color is chosen it is automatically entered. This function is accomplished by "get_boardcolor()".

Color Setup	Head BG	#EFEFEF	List BG	#FFFFFF	Name BG	#EFEFEF
	Border	#EEEEEE	List Switch	#EFEFEF	Separate Color	#D8D8D8
	Body BG	#FFFFFF	List Switch	#F6F6F6	Text Color	#333333

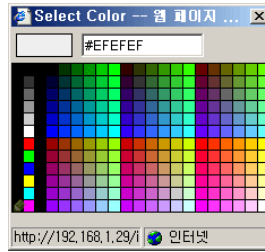
Below is a summary of color name, color ID and details displayed above.

Color name	Color ID	Details	ColorViewID	Applied automatically
Head background	HEADBGCOLOR	Background color for headline	vHEADBGCOLOR	X
Boarder	BORDERCOLOR	Table border color	vBORDERCOLOR	O
Content background	TEXTBGCOLOR	Content background color	vTEXTBGCOLOR	X
List background	LISTBGCOLOR	Background color of the board list	vLISTBGCOLOR	O
List switching	LISTSWCOLOR	Color to be used in turn with list background	vLISTSWCOLOR	O
List convert	LISTOVCOLOR	Color to be converted when mouse is over	vLISTOVCOLOR	O
Name background	NAMEBGCOLOR	Background color for name to be used in configuration	vNAMEBGCOLOR	X
Division color	BARRIERCOLOR	Color which divides headline and the list of board	vBARRIERCOLOR	O
Text color	TEXTCOLOR	Color of general texts (body, td etc.)	vTEXTCOLOR	

ColorViewID is cell's ID to show colors and configuration page is structured in format below. ID of ColorViewID cell has 'v' attached in front of the color.

<pre> <table cellspacing=1 border=0 cellpadding=0> <tr><td class=cell4name>Head background</td><td class=color_td> <input name=HEADBGCOLOR value="#!style.headbgcolor;" onChange="set_boardcolor(this,'vHEADBGCOLOR');" class=color_input></td> <td id=vHEADBGCOLOR bgColor="#!style.headbgcolor;" onClick="get_boardcolor('HEADBGCOLOR');" class=color_box> &nbsp; </td> <td class=cell4name>List background</td><td class=color_td> <input name=LISTBGCOLOR value="#!style.listbgcolor;" onChange="set_boardcolor(this,'vLISTBGCOLOR');" class=color_input></td> <td id=vLISTBGCOLOR bgColor="#!style.listbgcolor;" onClick="get_boardcolor('LISTBGCOLOR');" class=color_box>&nbsp; </td> </tr> <!--...Omitted .. Specification continues in similar manner ----!> </table> </pre>
--

Color specification part was implemented by using Java script "set_boardcolor()" and "get_boardcolor()" for users' convenience. Below is a dialogue window created when "Color Preview" cell is clicked and let user to choose a color.



The above color selection window is provided from DHTML Editor and it can be changed to a HTML document with different color combination.

ON/OFF Switch

Below are the switch-type items from board configuration. Only one of "ON" and "OFF" can be selected and "OFF" is the default value.

```
<input type=hidden name=FLAG_listborder value=OFF>
<input type=hidden name=FLAG_editor value=OFF>
<input type=hidden name=FLAG_ticon value=OFF>
<input type=hidden name=FLAG_words value=OFF>
<input type=hidden name=FLAG_nobody value=OFF>
<input type=hidden name=FLAG_remail value=OFF>
<input type=hidden name=FLAG_go2url value=OFF>
<input type=hidden name=FLAG_viewlock value=OFF>
<input type=hidden name=FLAG_noheadline value=OFF>
<input type=hidden name=FLAG_silent value=OFF>
<input type=hidden name=FLAG_realname value=OFF>
<input type=hidden name=FLAG_rmfree value=OFF>
<input type=hidden name=FLAG_file value=OFF>
<table width=100% cellspacing=0 cellpadding=0><tr>
<td><input type=checkbox name=FLAG_listborder #!if b.listborder;checked#!fi; value=ON>Border
</td>
<td><input type=checkbox name=FLAG_editor #!if b.editor;checked#!fi; value=ON>Editor</td>
<td><input type=checkbox name=FLAG_ticon #!if b.ticon;checked#!fi; value=ON>Icon</td>
<td><input type=checkbox name=FLAG_words #!if b.words;checked#!fi; value=ON>Comment</td>
</tr><tr>
<td><input type=checkbox name=FLAG_viewlock #!if b.viewlock;checked#!fi; value=ON>Closed</td>
<td><input type=checkbox name=FLAG_nobody #!if b.nobody;checked#!fi; value=ON>Unknown</td>
<td><input type=checkbox name=FLAG_remail #!if b.remail;checked#!fi; value=ON>Auto Reply</td>
<td><input type=checkbox name=FLAG_go2url #!if b.go2url;checked#!fi; value=ON>URL Link</td>
</tr><tr>
<td><input type=checkbox name=FLAG_noheadline #!if b.noheadline;checked#!fi; value=ON>No Headline</td>
<td><input type=checkbox name=FLAG_silent #!if b.silent;checked#!fi; value=ON>Silent</td>
<td><input type=checkbox name=FLAG_realname #!if b.realname;checked#!fi; value=ON>Real Name</td>
<td><input type=checkbox name=FLAG_rmfree #!if b.rmfree;checked#!fi; value=ON>Free Delete</td>
<td><input type=checkbox name=FLAG_file #!if b.file;checked#!fi; value=ON>Attach File</td>
</tr></table>
```

As you can see from above, to specify the flag value use the hidden <input> tag and set the value of the flag which supports the options as “OFF”. The checkbox type of <input> store the “ON” value only when it is selected.

Additional Variable Configuration

Below is a summary of HTML code which allows configuring the names of the additional variables. There are 26 additional variables supported between the ranges of 0 to 25.

```
<table cellspacing=1 cellpadding=0><tr>
<td> 0.</td> <td><input name='var[0]' value='#!b.var[0];'> </td>
<td> 1.</td> <td><input name='var[1]' value='#!b.var[1];'> </td>
<td> 2.</td> <td><input name='var[2]' value='#!b.var[2];'> </td>
<td> 3.</td> <td><input name='var[3]' value='#!b.var[3];'> </td>
<td> 4.</td> <td><input name='var[4]' value='#!b.var[4];'> </td>
</tr><tr>
<td> 5.</td> <td><input name='var[5]' value='#!b.var[5];'> </td>
<td> 6.</td> <td><input name='var[6]' value='#!b.var[6];'> </td>
<td> 7.</td> <td><input name='var[7]' value='#!b.var[7];'> </td>
<td> 8.</td> <td><input name='var[8]' value='#!b.var[8];'> </td>
<td> 9.</td> <td><input name='var[9]' value='#!b.var[9];'> </td>
</tr><tr>
<td>10.</td> <td><input name='var[10]' value='#!b.var[10];'> </td>
<td>11.</td> <td><input name='var[11]' value='#!b.var[11];'> </td>
<td>12.</td> <td><input name='var[12]' value='#!b.var[12];'> </td>
<td>13.</td> <td><input name='var[13]' value='#!b.var[13];'> </td>
<td>14.</td> <td><input name='var[14]' value='#!b.var[14];'> </td>
</tr></table>
```

Once the name of additional variable is specified, it can be run parallel with the stored content on post such as "#!p.var[];" syntax. Also, by utilizing "#!if b.var[];" syntax, data input can be received selectively. In case of web mail explained in Chapter 5, there is the function that received mail is saved to the board. This function saves the ESMTP data structure to the board data structure. For data moved from web mail to the board, values on web mail property can be specified using additional variables from 0 to 7. Below are the main data items of webmail which are saved as the additional variables.

Additional variable number	Distinguishable word	Details
0	From:	From: Sender (uid,name when board converted)
1	To:	To: Recipient
2	CC:	CC (carbon copy)
3	BCC:	BCC (Blind carbon copy)(seen only in sent mail)
4	ReplyTo	Reply address(Copied post->email when converted)
5	ReturnPath	Return address
6	Charset	Electronic mail original character set
7	Date	Date of Email composed

Direct Specification of Board Filter

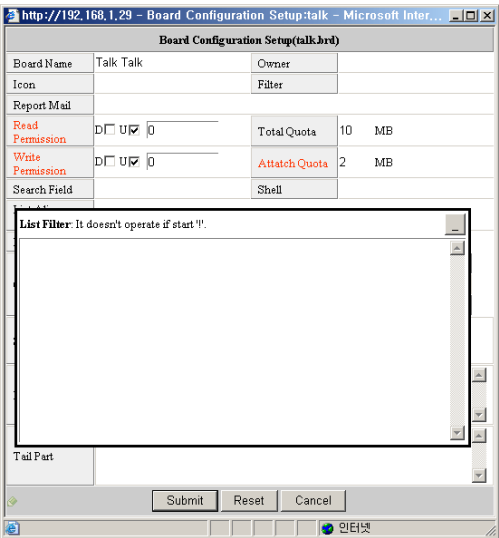
For boards generally, either standard filter managed by an Administrator or application filter with added abilities. General users cannot use by board configuration if the kind of board is not known. IntraCell Administrator can notify the kind of filter usable by users up at "board_rc.html".However liberal utilization of board in Group or personal space may be limited. For super users, Segio supports direct edition of board web filter which corresponds to view, edit, list, etc in configuration.

List filter: <textarea name='listfilter'>#!b.listfilter;</textarea>
Edit filter: <textarea name='editfilter'>#!b.editfilter;</textarea>
View filter: <textarea name='viewfilter'>#!b.viewfilter;</textarea>

Below is a HTML document implemented to setup only whenever required using "<div>~</div>" syntax in list filter.

<div id=listfilterdiv style="width:500px;height:240px;z-index:1;visibility:hidden;">
<table border=0 class=subtable>
<tr><td align=center>List filter:Does not work if it starts with an Exclamation mark(!).</td>
</tr>
<tr><td style=border-style:inset;border-width:1px;>
<textarea name='listfilter' style=width:490px;height:220px;>#!b.listfilter;</textarea>
</td></tr></table>
</div>

With above HTML, configuration screen will appear as below.



If it is not specified in "board_rc.html" file, it is not possible to change the setup values from configuration file. In this case the existing configuration is maintained. It is also possible to approve or restrict certain configuration items depending on the level.

Chapter 4 IntraCell

IntraCell is a basic unit of Segio Service. Segio service is provided based on domain name and IntraCell directory.

4.1 Intranet

Segio is designed to drive multiple IntraCells in one web server. Each IntraCell is organized with homepage and intranet service and therefore intranet is in operation as much as the number of IntraCells. To use intranet, you must be registered as a user and login.

A. Login and Management Tool

User logged into the intranet by entering UID and password is given a level between 1~9. Below is the summary of HTML implemented to let user login.

```
<form method=POST action="#!href.login," name=password target="log_target">  
  <input type=checkbox name=login value=alone>Forced Access<br>  
  UID: <input name=UID type="text" size="8" value="" > &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~  
  Passwd: <input name=PASSWD type="text" size="8" value="" >  
  <input type=submit name=login value="Login" >  
</form>  
<iframe frameborder=0 height=0 width=0 name="log_target"></iframe>
```

Above HTML content will appear as below image.

☐ Forced Access

UID: Passwd:

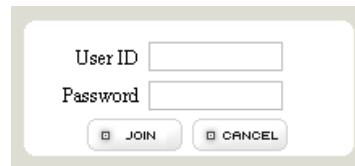
Forced access is an option to terminate the previous access and to connect again in case of logout failure or used by someone else. Below explains the items which allows input by "<input>" tags.

Name	Details	Remark
url	URL to retrieve if login successful, otherwise current location	
login	Login method (Forced access when "alone" is entered)	
uid	User ID (Registered ID)	
passwd	Password	

By using the introduced HTML code to allow login from the bottom status of web browser or to call separate pop-up window. If login is successful without specifying URL item, then the HTML document of web browser at present gets refreshed.

Login popup window

Login can be done by opening a separate pop-up window using Java script or "#!popup...;" syntax. If you log in using the pop-up window with the width less than 300 pixels, pop-up window disappears as soon as you are logged in. Therefore HTML document for login must be saved separately and launch a window as below using "#!popup...;" syntax. Please refer to the explanations in Chapter 2 for how to use "#!popup...;" syntax.



When successfully login in HTML document of the window is re-read to refresh the browser and pop-up window disappears. It is possible to display simple information of user logged in by using "#!if lv...;" syntax as below.

```
#!if lv>0;
..... User information section .....
#!else;
..... Login section .....
#fi;
```

Web browser selects a section appropriate to Login/Logout status of user and display.

Connecting a Management Tool

Web directory, configuration, board administration and Group administration menus are structured by using "#!href.admin...;" syntax. It can be convenient if the management/administration tools are made up as separate HTML document and included to web service depending on the needs. By doing the below, file can be saved and the management tool can be located where it is required using "#!load...;" syntax.

```

    #!if lv<9; #!return; #!fi;
</script>
    function admin_page_change(Select) {
        idx =Select.selectedIndex;
        aurl=Select.options[idx].value; //Execute only when value is specified.
        if(aurl.length>0)document.location.replace(aurl);
        Select.selectedIndex = 0; //Restores after execution
    }
</script>
<select name=admin_menu onChange="admin_page_change(this);">
<option value="">Management Menu</option>
<option value="">-----</option>
<option value="#!href.admin.html;" >Homepage </option>
<option value="#!href.admin.filter;">Filter Management </option>
<option value="#!href.admin.board;">Board Management </option>
<option value="#!href.admin.cell;" >Intranet Configuration</option>
<option value="#!href.admin.host;" >Web hosting Configuration</option>
<option value="#!href.admin.group;">Group Management </option>
</select>

```

B. User Management

User registration information exceptionally supports database such as MySQL and PostgreSQL by separate configuration. The specification of database is as follows.

Classification	Detailed information
MySQL	- Version : 4.1 or higher (Do not support UTF-8 for lower version than 4.1) - Library location : /usr/lib - O/S : RedHat 9.0 or higher
PostgreSQL	- Version : 7.3 or higher - Library location : /usr/lib - O/S : RedHat 9.0 or higher

Default character set of the system is based on UTF-8 and therefore user information is also saved in UTF-8. PostgreSQL is used for basic distribution version and MySQL can also be used by further configuration. □ Right to use of Segio does not include the license of MySQL.

User Registration Information Field Configuration

When Configuration ("Env") is clicked the screen is converted to register information field configuration. Further modifications in information fields are possible in English, Korean, etc. except the required fields (UID, PASSWD, UNAME, RNAME, UNIQSTR, EMAIL, QUESTION, ANSWER, ADDR, IMG). Information fields shown below are the ones not modifiable.

Information field	Details	Remark
UID	Unique user ID	
PASSWD	Password	
UNAME	Nickname	
RNAME	Real name	
UNIQSTR	Unique key (Social security number, etc)	
EMAIL	Email address	
QUESTION	Question (Used when forgot the password)	
ANSWER	Answer (Used when forgot the password)	
ADDR	Address	
IMG	Representative image (JPG, GIF, BMP etc. can be used)	

Below is the captured image of editing user registration information field of appropriate IntraCell.

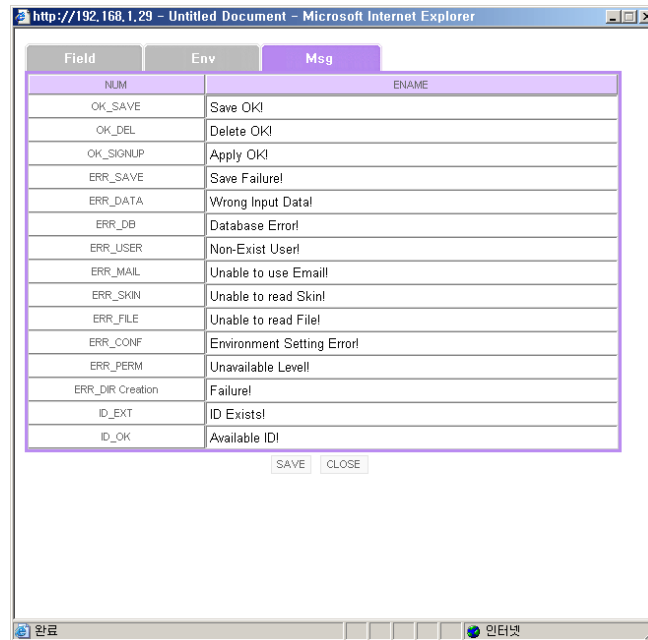
Field	Env	Mag	USE	MUST	MIN	MAX
1	UID	ID	☒	☐	10	2
2	PASSWD	Password	☒	☐	6	6
3	UNAME	Nickname	☒	☐	2	2
4	RNAME	Realname	☒	☐	2	2
5	UNIQSTR	Number	☒	☐	13	13
6	EMAIL	Email	☒	☐	5	5
7	QUESTION	Question	☒	☐	5	5
8	ANSWER	Answer	☒	☐	7	7
9	ADDR	Address	☒	☐	5	10
10	IMG	Photo	☒	☐	7	7
11	CONT	Introduction	☐	☐	7	7
12	SENDMAIL	Cellular	☐	☒	ON	3
13	TELNUM	Phone	☐	☒	ON	3
14	HAKBUN	School	☐	☐	OFF	5
15	BIRTHDAY	Birth	☐	☐	5	5
16	URL	Homepage	☐	☐	5	5
17	HOBBY	Hobby	☐	☐	5	5
18	JOB	Job	☐	☐	5	5
19	TYPE	Type	☐	☐	5	5
20	CLASS	Class	☐	☐	5	5

SAVE CANCEL

* Field names are mere names applied virtually and can be added or deleted. However in case of field name gets changes, user registration information stored according to each field does not change automatically which may cause problems.

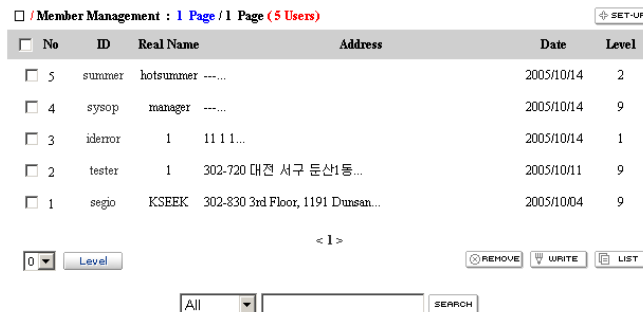
Message Configuration

User registration system can be changed to use other language by message configuration. Messages are internally saved by UTF-8 therefore it can be saved no matter what language is chosen.



User Management

Screen image below shows the user list registered in corresponding website. In screen shown below, edit, delete, level alteration, search and others for user information is possible. User management can be done for user with level 9 or appointed IntraCell Administrator only. If user below level 9 tries to access the below screen, the message “Not authorized” will appear and not allow the usage.



Select the checkbox next to the user for forced withdrawal then click Delete button to remove user information. Click the ‘Write’ button from user list to add new user as below.

Registration Form (This is the member profile modification state.)

- This is the member registration form. Register now, it's free!

* is the required item.

Member Profile

ID* ID Check

Choose a password*

Re-type password*

Password Question* Nickname when young?

Password Answer*

Nickname*

Realname*

Email* @

Member Address

Zipcode

Address

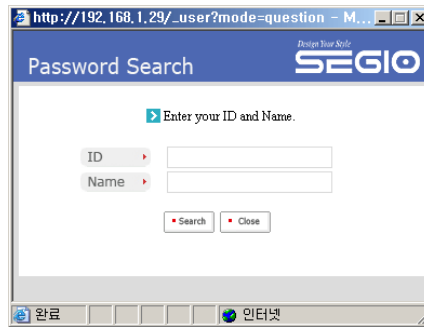
Registration Cancel

Check the checkbox of corresponding user from the user list, select the level to modify from the select box then click the level button to change the level of selected user.

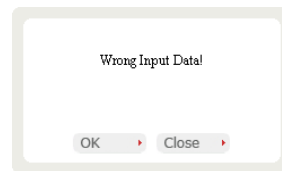
If you click the ID of corresponding user from the user list, modification screen appears. Fields other than ID(UID), real name (RNAME) and social security number (UNIQSTR) are modifiable.

Finding Password

If the user forgot the password, IntraCell Administrator should solve this problem by changing the password and notify this temporary password to the user. User may use the same password in other system therefore no matter what the password must not be shown. Below is an image of service to find the password.



Enter ID (UID) and the real name (RNAME) to answer the security question set when registered with the system and the password will be sent to the email address registered. If it was a wrong answer for security question or answer not entered at all, the screen appears as below.



To use this password fining service, email address frequently used and secured in other host, security question and its answer must be entered. If Q/A authentication fails, this is where IntraCell Administrator comes into play and changes it directly.

C. Web Directory Management

Web directory manager allows management to be done by accessing via web from homepage or web folder. Below is a web directory management tool.

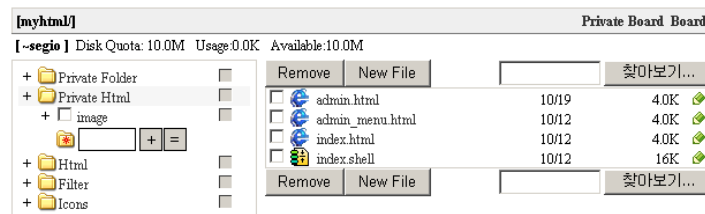
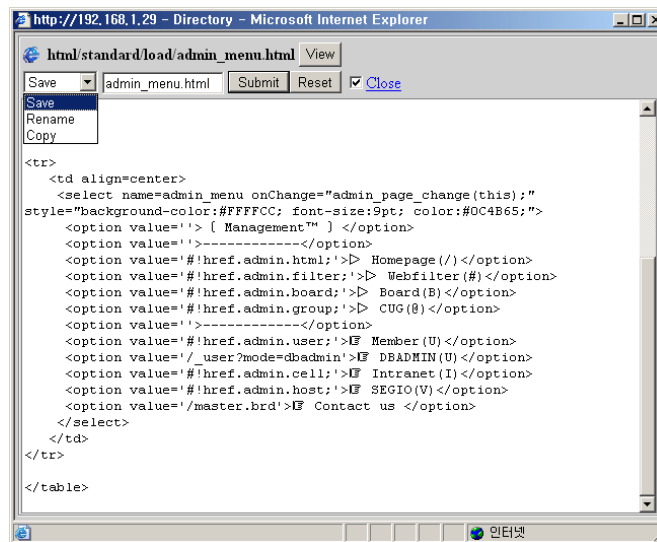


Image on the left hand side shows the boards and directory path. Current directory is indicated on upper left. If the checkbox of directory icon is checked then click "Remove" button on bottom right, the selected directory is deleted. The empty field is used when creating a new directory or changing the directory name. If a directory is selected, name entered and [=] button is clicked then a new directory will be created. Square signs on right of directory are drop buttons. Check this to move certain items. .

The right section shows the general files. A pop-up window appears when 'Modify' button is clicked on the right of the file list to change the file name or copy it into other name. Specified file form can be edited in MIME configuration. Below is an edit window to edit the text file.



As you may see from above image, text documents can be edited to save, rename or copy.

Segio Web Disk

Web Directory Manager has a merit since it can be used without separate installation process however, large number of directories or files cannot be transferred as in FTPs. To transfer a large number of files, Web Disk function is provided implemented with ActiveX. Web Disk is implemented with ActiveX and its execution is possible only in Microsoft Internet Explorers. ActiveX Web Disk is linked to web as below.

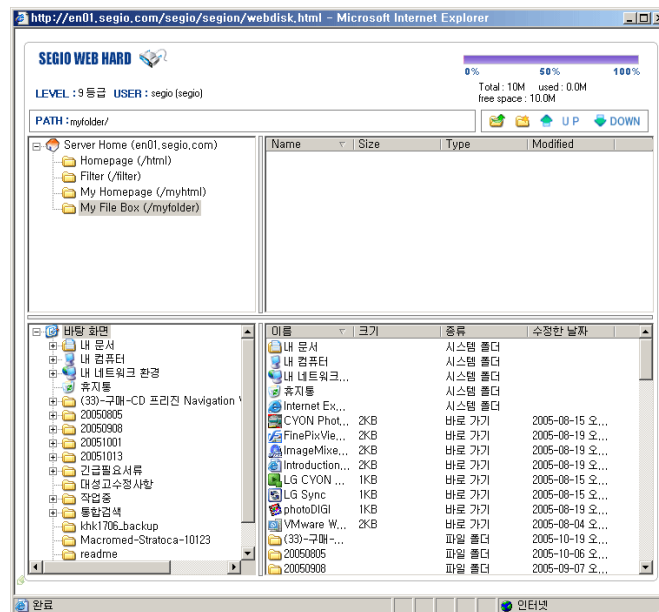
Format: #!i.webdisk,[Option1],[Option2];
 Option is written by the[reserved word=value] and distinguished by comma.
 lang:Language assignment reserved word; base: basic start point; width: control width; height: control height;
 Example: #!if u.lv>0;#!i.webdisk,base=/,lang=kr,width=700,height=500;#!fi;

Upper syntax is replaced by similar ActiveX syntax. Real replacement is differ from version.

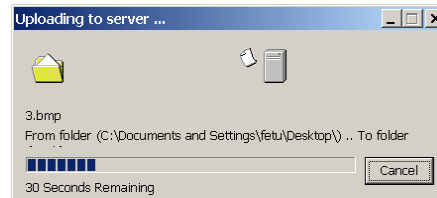
```
<OBJECT ID = "segiwebhard" codeBase="http://file.segio.com/..." >
  <PARAM NAME="DisplayType" VALUE="show">
</OBJECT>

<script for="segiwebhard" event="OnSegiOnFileXLoaded()" language="JavaScript">
  ....
</script>
```

ActiveX control is able to execute in personal pc by user agreement. Because that the operation of the ActiveX control make complete in C/S environment, it must be correspond with server and client version. “#!i.webdisk;” is the method of calling the ActiveX control which is matched automatically and it is suggested as the standard usage method. If possible, we recommend that you do not use the copy of the original document. Web disk control executed by ActiveX in Web browser is organized as below.



User ID, name, level, allocated capacity, used capacity, current folder path, etc. are displayed on the upper part of the Control. You can transfer large number of files by drag and drop process. Below shows the transfer process information.



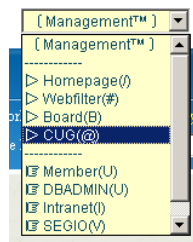
Web directory management tool or Segio Web Disk is used in same way for directory management of Groups and personal spaces.

4.2 Group Service

Group is one kind of the lower intranet provided fundamentally by Segio. Personal spaces, as explained earlier, can make communities within certain scale only whereas Group is prepared to implement relatively bigger sized community.

A. Group creation and configuration

IntraCell Administrator has authority to create and configure group(s). Configuration tool can be installed through the installation process of intranet management tool explained earlier.



Below is the example of the group administration screen when 'group' is selected from intranet management tool indicated above.

Group Admin [0]							
[New Group 1]							
NO.	ID	Name	Member	Board	Owner	Post	
☐	01	@model1	Individual/Friendship	0 / 100	5 / 20	00	384K / 500M 
Remove			◀ 01 ▶			1/10	

Click the GroupID for the configuration of each group, and select Group Name to move to bulletin board administration of that particular group. Click the deletion button after checking the check box, then the group is deleted. But only there is no board. Number in below right side show the available number of groups(10) and now installed group(s)(1)

Download the model

The right button of the each group make download the now group directory as one file. The download file has “*.cob” extension type and SEGIO administrator make register it. The function of restoring the downloading file to now operating group is not supported.

New creation

To create a new Group, select "newgroup" then configuration screen as below appears. Enter the new group ID into ID field and enter the values in below fields then click “submit” button to create a Group based on environmental configuration.

http://192.168.1.29 - Configuration - Microsoft Internet Explorer
New Group ID:
Internet
Name
Disk Quota
0
MB
Max User
0
users
Max Board
0
boards
List Length
0
Post Quota
0
Page Length
0
Board Quota
0
Board Icon
Owner
Color Setup
Border Color
#EEEEEE
Body Background Color
#FFFFFF
Text Background Color
#FFFFFF
List Background Color
#FFFFFF
List Outline Color
#F6F6F6
List Shadow Color
#EFEFEF
Text Color
#333333
Active Text Color
#333333
Banner Color
#D8D8D8
Head Background Color
#EFEFEF
Reverse Color
#FF0000
Name Background Color
#EFEFEF
Board Head
Board Tail
Submit
Reset
Cancel
완료
인터넷

Group is installed by selecting the one among the prepared design models. Group model is registered in the model management tool of segio administrator and selected among the models which is assigned or not by the language of the intranet. Details of each field from configuration screen are as follows.

Fields	Details	Remark
GroupID	Group ID of creation	
ServiceName	Group name	
Owner	Appointed Administrator (not related to level and whether joined or not)	
BoardIcon	Board icon to be used as default in lower boards	
DiskQuota	Allocated disk capacity	
MaxBoard	Maximum number of boards allowed	
MaxUser	Maximum number of members	
BoardHead	Design for upper part of the board(s)	
BoardTail	Design for lower part of the board(s)	

Group configuration is allowed only for the Group President however, information on disk capacity, maximum number of members, maximum number of boards, Group owner, etc. cannot be changed.

B. Group Administrator

Groups may operate member management system and implement lower intranet. Member management system can only take users registered to existing intranet only. Homepage addresses of Groups are notated as below format.

http://sm.kseek.com/@game/	game group: /group/game/html/index.html
---	---

An independent homepage of Group can be made according to the editing method of general HTML documents and also application of web filtering effect supported by Segio and therefore an independent homepage and intranet can be implemented.

User registration through the Group

Users registered in intranet are able to join the Group and therefore generally it is not possible for unregistered user to join the Group. However, since all required information is received when joining the Group, it is possible to register that user to the intranet at the same time.

Login to the Group

When a user is logged into the intranet, no separate login process is required to access Group. This is because login information is inherited. Below is the HTML document which can be

prepared separately for login. Pop-up window for login can be created by creating HTML document with below contents and use "#!popup...;" syntax.

```
<style>
.inputline { border-style:none; border-width:0px; width:100%; }
.inputcell { border-style:inset; border-width:1px; width:100px; }
.namecell { border-style:none; padding:2,3,0,3; }
</style>
<iframe name=hidden_frm frameborder=0 width=0 height=0></iframe>
<table border="0" cellspacing="0" cellpadding="1" style=padding:4; border=0>
<form method=POST action="#!href.login" target="hidden_frm">
<tr>
<td class=namecell>ID</td>
<td class=inputcell><input name=UID type=text size=12 class=inputline tabindex=1></td>
<td class=namecell>Password</td>
<td class=inputcell><input name=UID type=password size=12 class=inputline tabindex=1></td>
</tr>
<tr><td colspan=2 align=center>
<input name=JOIN type=submit value="JOIN" >
<input type=button value="Cancel" onclick="window.close();">
</td></tr></form></table>
```

Below image is the pop-up window using "#!popup...;" syntax from above HTML.



If login fails, it show an error message and login may be tried over and over. If login succeeds, a little window disappears and the Group homepage gets refreshed after the user information is recognized.

Group Management Tool

Administrator of the IntraCell has the autothority to make the new group or configure it by using the group management tool. To add to this, insert below the original HTML document to manage the board and HTML document

```
#!if l.lv==9;
<a href="#!href.admin.lboard;">Board</a><br>
<a href="#!href.admin.lhtml;">HTML</a>
#!fi;
```

If the upper document is placed in group HTML document, management tool for board and HTML is linked. It is changed to flexible management tool if you use the Javascript.

C. Group and Board Automation

In case that IntraCell administrator make new group, he should link it's URL in HTML document for using it. Group president can create the board of the group and he should link it to HTML document. It is very inconvenient in case that IntraCell administrator and group president who is not good at editing HTML document. To decrease this inconvenience, group and board automation functions are added.

Group link automation

Below is the short of the group automation link. Group is recognized as the resource of the IntraCell and below syntax is not operated in personal homepage and group homepage.

```
<script>
function group_anchor(guri, gname)
{
    if(guri.length<1)return;
    src  = "<tr><td height=22><a href=\""+ guri + "\">" + gname + "</a></td></tr>";
    document.write(src);
    return 0;
}
</script>
<script>
    group_anchor("#!l.guri[0];", "#!l.gname[0];");
    group_anchor("#!l.guri[1];", "#!l.gname[1];");
    group_anchor("#!l.guri[2];", "#!l.gname[2];");
    ...
</script>
```

Upper Javascript can add the HTML part and deal with the available number of the group. If the real number of the groups is over the upper number, some groups is not displayed.

Board link automation

Below is the short of the board automation link. Because IntraCell, group and personal homepage include the board in each location, below syntax is operated in all space that have the boards.

```

<script>
function board_link(buri,bid, bname){
    if(bid.length<1)return;
    if(bname.length<1)bname=bid;
    document.wirte("<a href='"+buri+"'>" +bname+"</a><br>");
}
</script>
<script>
if(#!l.boards;>0){
    board_link("#!l.buri[0];","#!l.bid[0];","#!l.bname[0];");
    board_link("#!l.buri[1];","#!l.bid[1];","#!l.bname[1];");
    board_link("#!l.buri[2];","#!l.bid[2];","#!l.bname[2];");
    ...
}</script>

```

Applying the upper Javascript, it is able to distinguish the menu area by the head division of the name. You can check if there is the special character as '#', '@' and '\$' in before the name and link it to other menu area through the special character.

```

<html>
<body>
<div id=open_menu></div><br>
<div id=share_menu></div><br>
<div id=study_menu></div><br>
<div id=hide_menu></div><br>
<script>
    function board_link(buri, bid, bname)
    {
        if(bid.length<1){ return; }
        if(bname.length<1)bname=bid;
        html="<a href='"+buri+"'>" +bname+"</a><br>\n";
        switch(bname.charAt(0)){
            case '#': document.all.open_menu.innerHTML += html; break;
            case '@': document.all.share_menu.innerHTML += html; break;
            case '$': document.all.study_menu.innerHTML += html; break;
            #!if l.lv>8; default : document.all.hide_menu.innerHTML +=html; break; #!fi;
        }
    }
</script>
<script>
    board_link("#!l.buri[0];","#!l.bid[0];","#!l.bname[0];");
    board_link("#!l.buri[1];","#!l.bid[1];","#!l.bname[1];");
    board_link("#!l.buri[2];","#!l.bid[2];","#!l.bname[2];");
    board_link("#!l.buri[3];","#!l.bid[3];","#!l.bname[3];");
    .....
    board_link("#!l.buri[19];","#!l.bid[19];","#!l.bname[19];");
</script>

```

Upper Javascript make support to maximum 20 boards.

4.3 User Service

User service is divided into two categories; closed services for private use such as web mail, web folder, etc and open type services including homepage. Table below shows the service type and its functions. User service is not supported to the all registered users in IntraCell, but user who has the assigned user directory space can use them.

A. User service construction

Function name	Details	Individual URL
Homepage	User's individual web service space	http://sm.kseek.com/~summer/
Bulletin board	User's individual boards space	http://sm.kseek.com/~summer/note.brd
Web mail	User's mail service space	None
Web folder	User's web directory service space	None
Homepage management	Homepage editing, management, etc	None
Bulletin board management	Create bulletin boards, configuration, Delete, etc	None
Member management	Approval of member joining, Level adjustment, Withdrawal.	None

URL accessible from the outside is not given to closed services, however, for open-type services, individual URL is given to the user. IntraCell Administrator configures for the closed function indicated above to be used in intranet.

User Homepage

Registered users may use the personal homepage service in the address form of domain address and user ID combined. Homepage space is provided by the quota process depending on the level. Users with allocated homepage capacity may use personal homepage, Web disk (web folder) and other functions.

http://sm.kseek.com/~summer/

Login, logout and management tool for user homepage have similar flow with the one for the Group.

Personal Boards

IntraCell Administrator designates the maximum number of bulletin boards for each user depending on the user class. User is given boards in following format.

http://sm.kseek.com/~summer/myboard.brd "myboard" board of user 'summer'
--

Web Folder

Web folder is used by the same management tool as for the homepage management. For homepage space, selective access is possible depending whether other users are logged in or not however, access by other users is not possible for web folder.

B. Configuration and Statistics

Configuration

User's configuration managemet tool can be supported as below.

`<a href="#!href.admin.mycell;">My Configuration</a>`

Upper syntax is linked to the user's configuration page wherever it is included in and he use this as below image.

My Home Setup			
Name			
List Length	0	Post Quota	0
Page Length	0	Board Quota	0
Board Icon	Owner		
Color Setup	BorderColor	#EEEEEE	
	BodyBGcolor	#FFFFFF	
	TextBGcolor	#FFFFFF	
	ListBGcolor	#FFFFFF	
	ListOVcolor	#F6F6F6	
	TextColor	#333333	
	AtextColor	#333333	
	BarrierColor	#D8D8D8	
	HeadBGcolor	#EFEFEF	
	ReverseColor	#FF0000	
	NameBGcolor	#EFEFEF	
Board Head			
Board Tail			
My Mail Setup			
Reply to	Mail Character set		
Mail Name			
Switch Option	☐ Forward ☐ Spam Filtering ☐ From to Board ☐ From to Mailbox		
Auto Remove	Spanbox 00 Day(s) Trashbox 00 Day(s)		
Forward			
Signature			
Signature *			

Configuration is divided into “My Home Setup” and “My Mail Setup”. In upper image, the “My Mail Setup” part is omitted and it is explained detail in webmail part. “My Home Setup” part is similar as group configuration.

User Access Statistics

Access statistics of access point is expressed only at that point however access statistics of oneself is expressed in any part of the HTML documents. Below is the web page where Java script was used to indicate one’s homepage access statistics.

```
<script>
function put_percent_bar(quota,data,usage,color)
{
    str="<table border=1 width=100%><tr><td>▶ Usage : <strong>";
    str+=("<font color=#FF3300>" + quota + "</font></strong>");
    str+=("in Total <b><font color=#6633CC>" + data + "</font></b> (" + usage + "%)</td></tr>");
    str+=("<tr><td bgcolor=#CCCCCC height=16>";
    if(usage>0){
        str+=("<table height=14 border=0 width='"+usage+"%'><tr>");
        str+=("<td bgcolor='"+color+"'>&nbsp;</td></tr></table>");
    }else str+= "&nbsp;";
    str+= "</td></tr></table>";
    document.write(str);
}
</script>
```

Use the web filtering code to call the function as below.

```
<script>
    put_percent_bar("#!u.diskquota;", "#!u.data;", "#!u.usage;", "red");
</script>
```

Below image is the example of bar graph representing present access statistics drawn by Java script.



Chapter 5 Message Service

A bulletin board of intranet accomplishes public information exchange. On the other hand, for private information exchange, Segio provides separate personal services including chatting, memo and web mail. Each service has difference in transfer speed, data storage property and others as below.

Service name	Openness to public	Storage property	Property details	Delivery
Web mail	Not open to public	Non-volatile	Personal use only	Indirect
Memo	Not open to public	Semi-volatile	File transfer and notification by Messenger is possible	Direct
Chatting	Not open to public	Volatile	Implemented as web chatting service with Messenger	Direct

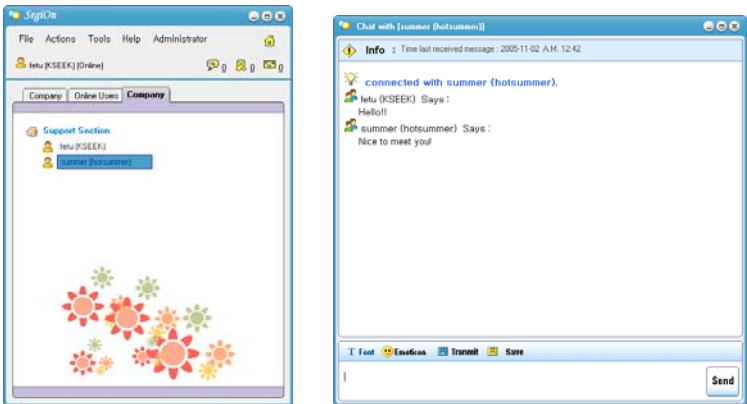
Memo and chatting have closely related to the Messenger and even if the Messenger is not installed, they are implemented to be used as web service.

5.1 Memo and chatting service

Intranet which has its base on the web has limitation since prompt replies between users are not possible. Memo has relatively low persistency compared to other services but delivered immediately. Chatting has bigger volatility that Memo but it is faster to deliver the message.

A. Segio Messenger

Segio Messenger is a product sold separately from Segio and is Microsoft Windows series application. The image below is the Segio Messenger for business use.



Installation guide and functional explanation are provided separately on purchase of Segio Messenger.

B. Memo.

Memo is function to deliver certain data to specific or multiple users instantly. Even the users without web mail or personal homepage can use the Memo function. A convenient interface is provided for Messenger user however, Web Memo function can be used without having the Messenger. Memo function is semi-volatile as memos are deleted from the server after valid term.

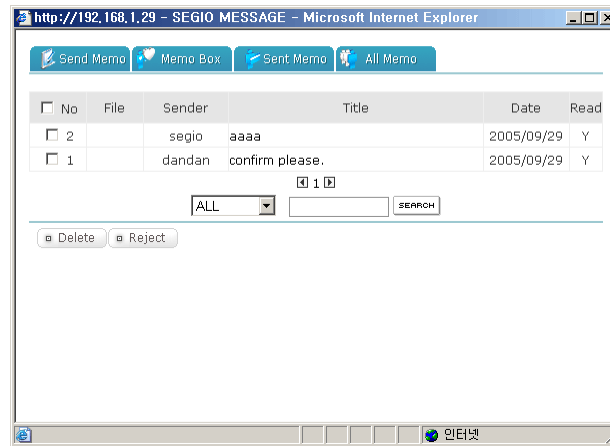
Sending a Memo

Memo can be sent to either certain selected user(s) or to all users. When you send memo to certain users, select “USER” (refer to image below) and enter IDs and use a blank space to divide each user. Memos can be transferred up to 30 users.

When sending a memo to all users, select “ALL” from the screen as below then recipient ‘s (To) field is deactivated and you will only have to fill in the title and content to send. Memo with "ALL" selected is saved in “All memos” and public access intranet users and from all messenger.

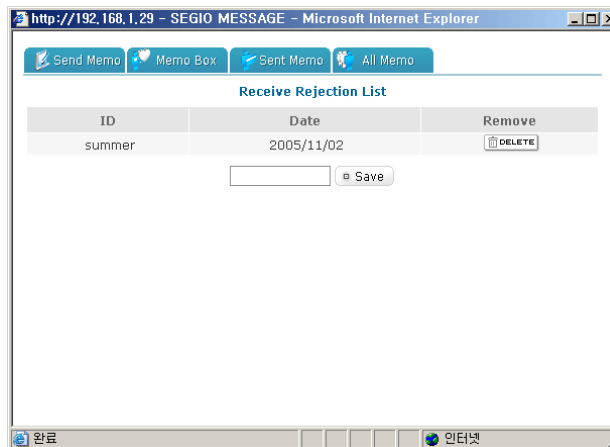
Checking the Memo

Memos are sorted and store in Memo In, Memo Out and All Memos. Memo In box stores received memos and Memo Out box stores sent memos. All Memos box stores memos sent to everyone.



Memo Blocking

You can block the memos from unwanted user. Enter desired user ID (UID) as below then you will not receive any further memos from that user. Blocked user will be notified when sending a memo with a message “Your memos are blocked.”



C. Chatting.

Chatting is a service provided to support the communication between users who logged in. In messenger, the chatting room can be opened and support the two person talk between users. User

who connect the web can use the chitting which is implemented by installing either JAVA applet or ActiveX control and chatting room and two person talk are not supported.

Java applet Chatting.

Java applet can be executed on all browsers of Linux/Uni and Microsoft Windows series. Software named JVM must be installed in accessed user's computer to operate. If JVM is not installed already, download it from SUN's Java website "<http://java.sun.com>" by retrieving "JVM" then install it. For server, Java applet file must be installed. Java applet has superior features than ActiveX from a security point of view but it's slow and has the limit to support the user convenience. ActiveX is fast and support the user convenience but has the weakness of security. To cover the weakness of the security, the world authentication service is introduced and all ActiveX control of the SEGIO is supported under international authentication. Below suggest the method of calling Java chatting.

Format: `#!i.javachat,[Option1],[Option2];`
Option is written by form as `[reserved word=value]` and distinguished by `“,”`. `bwidth:control width;`
`height: control height;`
Example: `#!if u.lv>0;#!i.javachat,width=150,height=200;#!fi;`

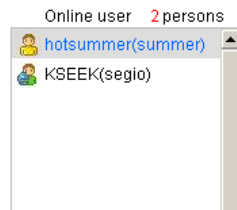
Java applet is called and executed by web browser from "<applet>" tag. Below is the general calling method of Java applet.

```
<applet code=message.class codebase=/ archive=message.jar width=2 height=2>
<PARAM ...>
...
</applet>
```

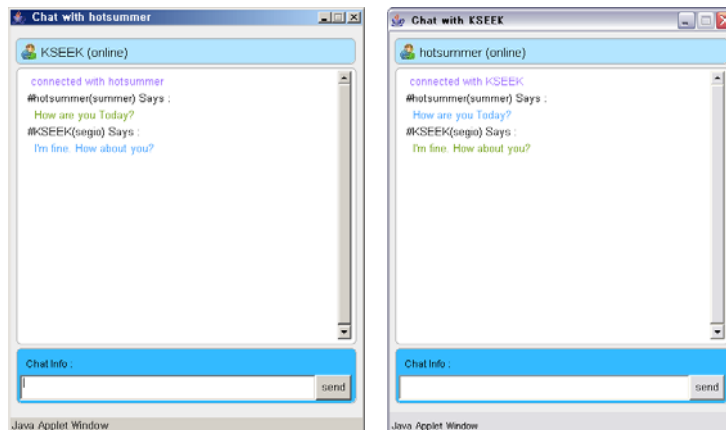
"message.jar" file has several "*.class" files compressed and "message.class" plays the main role for execution. "<PARAM ...>" tag transfers information to Java applet.

Applet operates effectively only when web page continue to exist. If web page which called the applet is changed or refreshed, applet stops. When browser refreshes, running applet is dropped and executed with a new applet. Use of chatting service is possible if applet call syntax is written in all HTML documents however if you read a post or move to other web page, chatting service is stopped.

To maintain a continuous conversation it is possible to call applet with separate HTML document. Also, it is possible to make this particular HTML document as a separate pop-up window to continue chatting or divide the hidden frame without the size of the web browser and call applet. If you use a pop-up window, it should be kept open throughout the chatting whereas method of using the hidden frame allows chatting together for everyone connected.



It is saved as "/etc/shhttpd/bin/message.jar" which is an applet for chatting service and if you save it as "html/message.jar" for each IntraCell, IntraCell applet is executed prior to the other. If you may want to use the other languages set and chatting applet in each IntraCell, you should visit file.segio.com and download the appropriate version and upload in homepage. This is the area that only IntraCell administrator can select and work. When you do double click the user's name, 2 person talk window will be displayed.



Upper images are the windows which is showed to users who demand and receive talk. When you input the talk, give and take the messages each other like upper. Because it support the UTF-8 character set, express the various charaters in one screen and if the SEGION messgenger is installed, you are able to talk with users who access with messenger.

WAKEUP

If Java applet is executed in area with 60 pixels of width and 60 pixels of height or higher, it is possible to show a list of connected people and select the user you want to talk to. However if it is

executed in smaller area than that it is impossible to neither see the list of connected people nor start chatting by selecting a user. In this case, make a HTML document with "#!u.wakeup;" filtering code used and open up a pop-up window whenever you want to use the chatting service as below.

```
<title>Waking up my chatting room</title>
#!u.wakeup;
<script>
window.close();
</script>
<body>
You may close now.
</body>
```

Pop-up window made by Java script disappears immediately and protocol called “wakeup” is transferred to message server as soon as HTML document is filtered. Message server activates the message with the highest priority when connected to several chatting services including Messenger, Java chatting, ActiveX chatting and others.

SegiOnWebX Call Syntax

SegiOnWebX is a chatting program implemented by ActiveX control. All users must install ActiveX control and unlike applets, it is not executed in web browsers of Linux/Unix systems. ActiveX is not included in every distribution like Java applets. If it is not installed in user’s PC, web browser ask if you install or not. Then you may install it immediately or after checking the installation and usage of the ActiveX chatting by using the segio.com’s client support service. Below is the method of calling the SegiOnWebX.

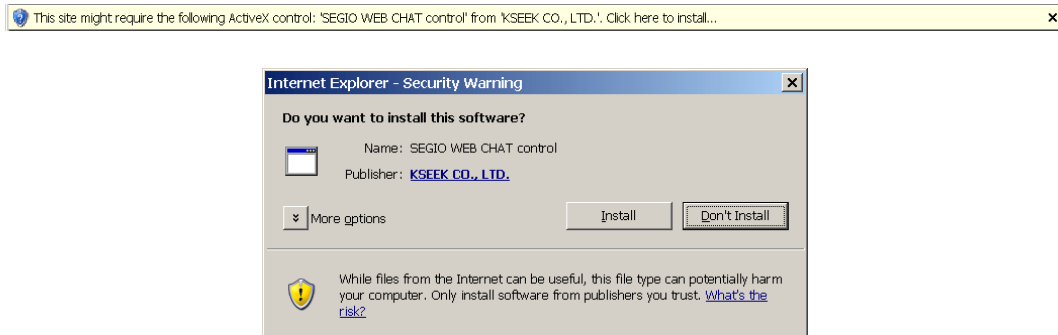
```
Format: #!i.chat,[Option1],[Option2];
        Opion is written by form as [reserved word=value] and distinguished by “,”.      lang:Language
assignment reserved word;   width:control width;   height: control height;
Example: #!if u.lv>0;#!i.chat,lang=kr,width=170,height=200;#!fi;
```

Upper example may replace as below HTML document. HTML document may differ from the Segio’s patch version. So, you may not write the replaced HTML document and call the ActiveX control.

```
<OBJECT id="segiwebx"
codeBase="http://file.segio.com/..."   height=200   width=170   classid="CLSID:86970572-FF8C-4F2E-8ACD-
3C9091523C3E">
<PARAM NAME="DisplayType" VALUE="show">
</OBJECT>
<script for="segiwebx" event="OnSegiOnWebxLoaded()" language="JavaScript">
.....
</script>
```

ActiveX control is operated in higher Explorer 5.0 of Microsoft.

If ActiveX control Version 1.0.0.1 is not installed, it try to install it automatically from the assigned URL address. At this moment, installation screen as below is shown on web browser. (Warning: Windows XP or higher versions presents warning as below then click the ActiveX control installation menu to bring out installation screen as below).



Java applet must apply one between method of direct showing the user list from all browsing screen and calling the window frame by “#!u.wakeup;”. If java applet is called in every screen, it’s access state is contiously refreshed. ActiveX is also able to use as like java and maintain the connect state as showing the conneted user list in every screen.

Below is the method to show the user’s connetction information in connect state.

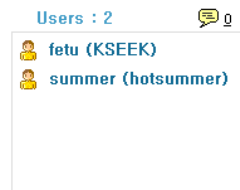
Format: #!i.chat,[Option1],[Option2];

Opion is written by form as [reserved word=value] and distinguished by “,”.

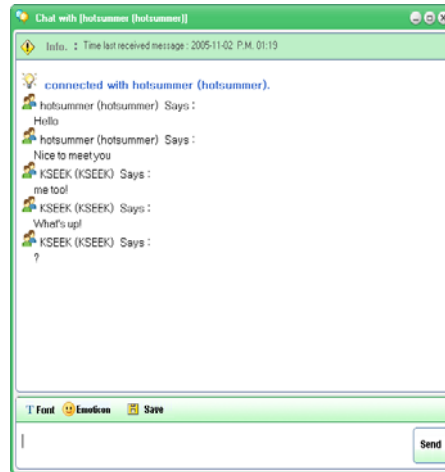
lang:Language assignment reserved word; width:control width; height: control height;

Example: #!if u.lv>0;#!i.chat,lang=kr,width=170,height=200;#!fi;

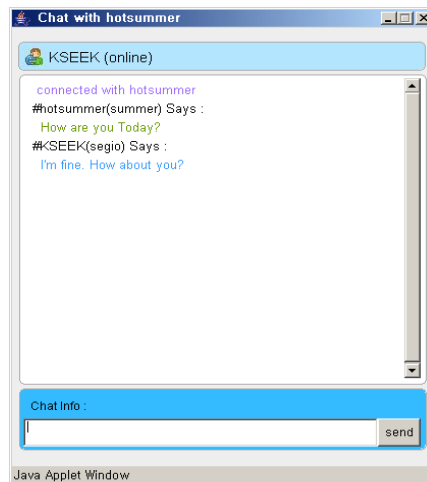
The execution screen of ActiveX control implemented by such syntaxes is as below.



Upper list can be placed in any position of the webbrowser. If you click the upper balloon help, you can see the open chatting room. Right figure is the number of the open chatting rooms. Double-click the user to chat with desired user real-time.



2 person talk executed by ActiveX control is the same interface with the messenger. Upper screen is the 2 person talk in messenger and continue to talk with connecting the java applet talk as below.



5.2 Web Mail Service

To use web mail, Procmail from Chapter 1 must be installed. Web mail is valid only to IntraCells and users who secured the Right of Use. Configuration of webmail is included in IntraCell and person configuration.

A. Link Service URL

HTML document allows user with level 1 or higher to use web mail service by checking the level. Below shows 2 simple methods.

Example 1) Simple link method

```
#!/if lv>0; <a href="/_mail/">Web mail</a> #!fi;
```

Example 2) Using "#!popup..." syntax

```
#!/if lv>0; <a href=# onclick="#!popup,webmail,width=800,height=600;">Web mail</a> #!fi;
```

"#!/if lv>0;" means IntraCell registered user. From the second example, "#!popup.webmail," creates separate window for web mail service. It is recommended to use the 2nd method as much as possible. There is an alternative method to create a separate window using Java script as below.

```
<script language=javascript>
function open_window(url){
opt=width=800,height=600,menubar=0,toolbar=0,scrollbars=1,resizable=1';
window.open(url,"pop_577",opt);
return false;
}
</script>
```

```
<a href="#" onclick="event.returnValue=false;oeprn_winow('#!href.webmail;');">Web mail</a>
```

If link is done as above, frames required by binary is organized automatically depending on the setup value of the rest window for web mail service structure.

Other configuration

To allow using web mail, Segio registers web mail users regularly to virtual user table. During the procedure of automatic remaking of virtual user table, other virtual users added by System Administrator may be deleted. This is applied same to the local host name configuration to be used as an address of web mail.

In "/etc/shttpd/conf/", there are files including "m_localhost.conf", "m_virtuser.conf" and others, and each of these are automatically inserted into "local-host-names" and "virtusertable" of each

/etc/mail/. Editing method of each file is the same as the method of "virtualusertable" and "local-host-names".

B. Configuration

Web mail configuration is managed as the part of the IntraCell configuration. Below is the configuration of the web mail part included in IntraCell configuration.

Mail Character set	utf-8	Mail Head Height	152
Mail Size	30	Mail Menu Width	210
Receive Mail Character set	utf-8		
Mail to Board	Receipt UUIDs	Target Board	
		brd	

Web mail makes use of browser by dividing the browser into 3 frames, top part(m_top), below left part(m_menu) and below right part(m_body). If the top frame height is set as 0, the web page has 2 frame structures after all. M_menu frame is used that link the mail box and service and mbody is used that show and edit the mail.

Top frame height	☞ top frame height, working as 2 frames if set to 0
Menu frame height	☞ Width of menu frame. Adjustable within the range of 80 to 300 pixels
Effective width	☞ Effective width of body frame (600 pixel default, input in percentage possible)
Character set	☞ Character set kinds that are supported (To be selected in Compose page)
Edit capacity	☞ Data size allowed for Compose (Number of attached file included)
File attachment	☞ Maximum number of files allowed to attach for Compose
Receive character set	☞ Default character set of the mail which the character the set is not assigned.

In the same language of each nation, there are many cases that without assigning the character set, it is recognized basically. For example, in korea, use the “EUC-KR” character set basically and mail which is sent without signing “EUC-KR” may be read in every Korea’s mail server. “EUC-JP” in Japan and “EUC-CN” in China are the basic character sets. Receive character set configure the basic character set when recive the mail which assigns no character set.

Board Conversion (mail2board)

Board conversion is a function to save received email to specified board. IntraCell Administrator can specify up to boards which corresponds to the user ID. The number of user IDs can be entered by distinguishing space.

C. Web mail configuration

Web mail is a service used individually by registered users. IntraCell Administrator implements and manages the web mail interface and all web mail users are using the same web structure specified by IntraCell Administrator. Below is the example of the web mail.



Previously, we explain that the web mail is organized by 3 frames. If design is done by combining several images to provide flexible UI, then it is recommended to save the design into the lower architecture of "html/segio/mail/" directory. If you organize this as regular form when other well-structured web mail is emphasized with design later on.

#!m; Filter Code

It is a filter code working only in web mail filter. Web mail adopts several exclusive filters but not too liberal in terms of design structure. In exclusive filter, design change can be made by using filter code of #!m...; within a given range.

#!m.title;	1.28 ⁺ Displays the title E.g.) Inbox, Outbox, Compose, Administration;
#!m.compose;	1.28 ⁺ Compose link
#!m.inbox;	1.28 ⁺ InboxInbox link
#!m.sentbox;	1.28 ⁺ Outbox link
#!m.spambox;	1.28 ⁺ Spambox link
#!m.trashbox;	1.28 ⁺ Trashbox link
#!m.userboxes;	1.28 ⁺ Link to the mailbox added by user (Linked to many by table)
#!m.address;	1.28 ⁺ Link to the address book management tool
#!m.mymailbox;	1.28 ⁺ Link to the mail box management tool
#!m.mysetup;	1.28 ⁺ Personal configuration link
#!m.href.mymailbox;	1.28 ⁺ My mail box management URI
#!m.href.mysetup;	1.28 ⁺ My configuration URI
#!m.href.address;	1.28 ⁺ My address book URI
#!m.href.addressfind;	1.28 ⁺ My address book search URI(For browsing the Address book in Mail edit filter)
#!m.href.setup;	1.28 ⁺ Web mail configuration URI
#!m.href.spam;	1.28 ⁺ Spam filtering management tool URI
#!m.myfolder;	1.28 ⁺ Myfoler management
#!m.mboxquota;	1.28 ⁺ Allowed quota for web mail (Differs depending on Level)
#!m.mboxdata;	1.28 ⁺ Display the size occupied (with signs KB, MB etc)
#!m.mboxusage;	1.28 ⁺ Usage percentage figure(disply bar graph with javascript)
#!m.mboxlist;	1.28 ⁺ See the all mail box status(Using in body frame)

Below is the reserved words related to the attribution of the email and it is used into read or edit filter to transfer the email.

#!m.compossize;	1.28 ⁺ Compose size limitation
#!m.to;	1.28 ⁺ Email recipient (to)
#!m.cc;	1.28 ⁺ Email referral (cc)
#!m.bcc;	1.28 ⁺ Email blind referral (bcc)
#!m.subject;	1.28 ⁺ Display the subject
#!m.context;	1.28 ⁺ Display the context
#!m.ctype;	1.28 ⁺ Display the Content-type of the context (basically text/plain)
#!m.date;	1.28 ⁺ Mail sending date
#!m.m_list;	1.28 ⁺ Go to the email list
#!m.m_del;	1.28 ⁺ Delete email
#!m.mboxselect;	1.28 ⁺ Mail box selection display for moving mail box
#!m.m_move;	1.28 ⁺ Move the email to other email box
#!m.m_forward;	1.28 ⁺ Forward the email
#!m.m_up;	1.28 ⁺ Read the upper list mail
#!m.m_down;	1.28 ⁺ Read the lower list mail
#!m.data;	1.28 ⁺ Size of the email
#!m.mails;	1.28 ⁺ Number of mails in the mail box
#!m.mailno;	1.28 ⁺ Number of now email in mail box

Below is the reserved words used in the exclusive list filter. There are the commonly used reserved words and they are operated differently in the case.

#!m.querybox;	1.28" Display the mail box search field and input box
#!m.list;	1.28" Show the mail list
#!m.m_list;	1.28" Show the mail list again
#!m.pagemenu;	1.28" See the mail box page menu
#!m.m_remove;	1.28" Delete the mail
#!m.mboxselect;	1.28" Display the selection for moving mbox
#!m.m_move;	1.28" Icon menu which move the selected mail
#!m.data;	1.28" Amount of using data of mbox
#!m.totalmails;	1.28" Total number of the mail box
#!m.mails;	1.28" Number of now searching mail in main box
#!m.pages;	1.28" Now page number of the mail box
#!m.pageno;	1.28" Now page number of mail box list

#!addr; Filter Code

#!addr; filter code is the reserved words which is related to the mail address book and usually used in “/filter/mail/addr_browse.html” filter file which search the mail address. Below are the kinds of the filter.

#!addr.query;	1.28" Character array input by search query ex) <input name=query value='#!addr.query;'>
#!addr.m_seek;	1.28" Search (Display the icon)
#!addr.list;	1.28" Display the address book folder or address list in the folder
#!addr.m_top;	1.28" Move to the uppest level in address search(Display the icon)

Web mail Exclusive Filter

Web mail is structured based on 3 tier frame and it is summarized in the table below.

Frame name	Frame ID	Details	Remarks
Head frame	m_head	Occupies the upper part of web browser	
Menu frame	m_menu	Left hand side of web browser, Management tool, Mailbox list	
Body frame	m_body	The rest part of web browser, Email list, Read, Compose	

7 files below are related to the configuration of web mail UI and located in "filter/mail/" directory of IntraCell. Therefore edit by directory management tool is possible.

addr_rcpt.html	1.28" Left frame of Compose / Address Search window	
addr_browse.html	1.28" Right frame of Compose / Address Search window	#![];
frm_head.html	1.28" Default screen layout of m_head frame	
frm_menu.html	1.28" Default screen layout of m_menu frame	
frm_body.html	1.28" Default screen layout of m_body frame	
m_edit.html	1.28" Screen layout of Compose of m_body frame	
m_view.html	1.28" Screen layout of View mail of m_body frame	#![];
m_list.html	1.28" Screen layout of Mail list of m_body frame	#![];

Files with "#![];" signs on the right must be configured to include "#![];" syntax. For Web mail of Segio 3.0, application of web design as for Read and List function of board for View mail, Compose, Mail list, Management Management is impossible.

Web mail Configuration Document

It is recommended for web mail to locate related web documents and images files to lower directory "html/mail/" of IntraCell.

html/mail/	It is recommended to locate images and web documents used for web mail
html/mail/index.shell	Default shell to be adopted among functions used together with web mail
html/segio/mail/mail.css	Often used css in web mail filter and shell(it's not essential)
* MyFolder etc. adopts it as a default shell	

Style Application of Web Mail Document

All documents related to web mail configuration can be administrated by management tool and supported with EditOnView. They are reserved as class so they can apply Style for HTML area created by web mail binary while each document is filtered. Image below shows a part of the web browser reading a mail.

```
<tr>
<td class=cell4name>address</td>
<td class=cell4input><input class=inputcell style=width:100%;></td>
</tr>
<tr><td colspan=2 class=cell4textarea><textarea></textarea></td></tr>
```

If the result of the execution of web mail is seen as upper, it's possible to construct that the web design keep the consistence through changing the each element of the HTML using by CSS method. Below is the brief of the class which is used in "<td>", "<input>" and etc of the binary.

Class name	Purpose details	Remarks
cell4name	td for "Sender" in Compose, Read mail	
cell4value	"Summer<summer@sm.kseek.com>" td from Inbox	
cell4input	Cell for input (border of input is none)	
cell4textarea	td for contents editing from Inbox	
cell4list	General list structure td from mail list	
cell4headline	Headline structure th from mail list	
cell4pages	Shell indicating the page from email list	
cell4title	Upper concept name of the cell4name	

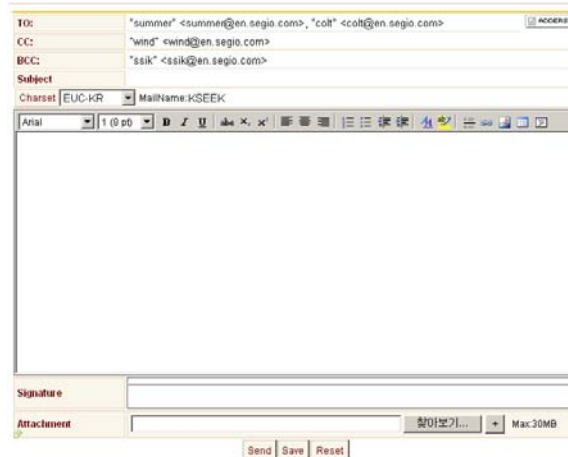
Below is the example of the applying the CSS style to some class.

```
<style>
.cell4name { border-style:outset; border-width:1px; padding:'0,3,1,3'; }
.cell4input { border-style:inset; border-width:1px; padding:'0,0,0,0'; }
.inputcell { border-style:none; border-width:1px; padding:'0,0,0,0'; }
.cell4list { height:20;border-bottom-style:solid; obrder-bottom-width:1px; paddind:'0,4,1,4'; }
.cell4list { height:20;border-bottom-style:solid; border-bottom-width:3px; border-color:#f0f0f0; }
</style>
```

SEGIO web mail is controlled by the exclusive filter in lower 'filter/mail/', upper style definition syntax is located in these filter documents. Also service related to the management is constructed by the 'html/segio/mail/index.shell' file and style can be defined in it.

Email Edit Filter

"filter/mail/m_edit.html" file is an email edit filter. Email edit filter is closely related to the board edit filter. Forwarding and reply of email are inherited from the existed mail. Attributes of the inheritance is body, inline file and attatch file. Forwarding includes the attatch file automatically buy reply includes only inline file of the boy. Below is the compose window by the edit filter.



Below is the brief of the Javascript.

```
<script language=javascript>
function address_browser(){
  window.open("#!m.href.addressfind;','address_win','width=600,height=400,scrollbar=1,resizable=0');
}
```

```

function set_rcpt(no, value){
    var ele=null;
    if(no==1)ele=document.editform.to;
    if(no==2)ele=document.editform.cc;
    if(no==3)ele=document.editform.bcc;
    if(ele!=null)ele.value=value;
}
function plus_filefield(form)
{
    count=form.count.value;
    if(count>5)return false;
    count++;
    form.count.value=count;
    str = '<br><input type=file name=file style=width:99%>';
    document.all.filefield.innerHTML+=str;
    return false;
}

```

"address_browser()" function and "set_rcpt()" function plays important roles in searching the email address book and are closely related to Java script included in "filter/mail/addr_rcpt.html". "plus_filefield()" function is to expand the maximum number of attached files. Below is a summary of HTML of email edit filter.

```

<head>
<!-- Javascript ---- !>
<title>Segio Webmail </title>
<link href=/segio/mail/mail.css' rel=stylesheet' type=text/css>
</head>
<font size=3><b>New Mail</b></font>
<table width=100% border=0 cellsapcing=2 cellpadding=0>
<form name=editform method=post enctype='multipart/form-data' target=action_target>

<tr>
<td>TO: </td><td><input name=to value="#!m.to;" class=input></td>
<td>
<img border=0 src=#!m.icon,m_getaddr.gif;' onClick="event.returnValue=false;address_browser();"
</td></tr>
<tr><td>CC: </td> <td colspan=2><input name=cc value="#!m.cc;" class=input></td></tr>
<tr><td>BCC:</td> <td colspan=2><input name=bcc value="#!m.bcc;" class=input></td></tr>
<tr><td>제목</td> <td colspan=2><input name=subject value="#!m.subject;" class=input></td></tr>

<!-- Character and Type configuration ----!>
<tr><td colspan=3>
<textarea name=context>#!m.context;</textarea>
</td></tr>
<tr><td>서명</td><td><pre>#!m.signature0;<hr>#!m.signature1;</pre></td></tr>
<tr><td><input type=onfile type=hidden value="">
<tr><td><a href=# onclick="#!popup,onfile;" >ServerFile</a></td><td id=serverfile> </td></tr>

```

```

<tr><td>Attachment</td><td id=filefield>
<input type=file name=file style=width:99%;"></td>
<td><input type=button value=' + ' OnClick="plus_filefield(this.form)" ></td>
<td>Quota:#!m.pquota;MB</td></tr>

<tr><td colspan=3 align=center>
<input type=submit value='Submit' name='act_send '>
<input type=submit value='Save' name='act_save '>
<input type=reset value='Reset' class=button name='act_reset '>
</td></tr>
</form></table>

<!-- DHTML Editor calling section -->
<iframe scrolling=no frameborder=0 height=0 width=0 name="action_target"></iframe>

```

Below is the brief of the HTML which input the character set and sender name.

```

<tr><td colspan=3 class=cell4input>
Character Set
<select name=charset>
<option value='UTF-8'>UTF-8</option>
<option value='EUC-KR' selected>EUC-KR</option>
<option value='EUC-CN'>EUC-CN</option>
<option value='EUC-JP'>EUC-JP</option>
<option value='ISO2022JP'>ISO2022JP</option>
</select>
Sendername:<input class=input name=mailname value='#!m.mailname;'>
</td></tr>

```

In upper document, character set is able to be selected and use make decision what character set is configured. Below is the syntax which call the WYSIWYG editor by DHTML. Use the DHTML editor used in the board.

```

<script language="Javascript1.2">
<!--
_editor_url = "/icons/editor/";
var win_ie_ver = parseFloat(navigator.appVersion.split("MSIE")[1]);
if (win_ie_ver >= 5.5) {
    document.write('<scr' + 'ipt src="' + _editor_url + 'editor.js">');
    document.write(' language="Javascript1.2"></scr' + 'ipt>');
} else {
    document.write('<scr' + 'ipt>function editor_generate() { return false; }</scr' + 'ipt>');
}
-->
</script>
<script language="javascript1.2">
editor_generate('context');
</script>

```

Webmail List Filter

Webmail list filter play the role to show the mail list per page unit when open the mail box. Blow is example of the email list.



If you open the mail box, then email list is displayed and it support the function of deletion of the selected email, moving, searching, seeing the total list and etc.

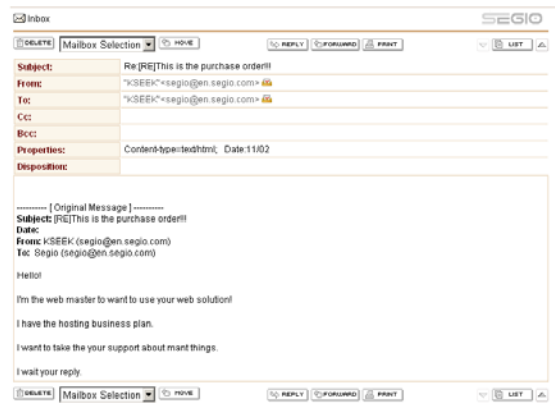
```
<script language="JavaScript">
function reverse_check(tform) {
    var i,j;
    var checked=tform.reverse_ck.checked;
    for(i=1,j=tform.elements.length;i<j;i++){
        var ele=tform.elements[i];
        if(ele.name=="normal_ck"){ele.checked = checked?!ele.checked:checked;}
    }
    return;
}</script>
```

Below is the summary of the email list filter. It is completed by merging the upper and lower javascript.

```
<title>SEGIO Web Mail </title>
<!------ java script: reverse_check(); ---->
<style>
.cell4list{ border-bottom-style:solid;border-bottom-width:1px;border-color:#FF99AA;padding:'0,3,0,3'}
.cell4last{ border-bottom-style:solid;border-bottom-width:3px;
border-color:#!style.barriercolor;';padding:'0,3,0,3'}
.cell4headline{border-bottom-style:solid;border-bottom-width:3px;
border-color:#C38F54;padding:'0,3,0,3'background-color:#F3E1CA; font-size:12px;}
</style>
<body bgcolor=#FFFFFF leftmargin=0 topmargin=0 marginwidth=0 marginheight=0>
<table border=0 cellspacing=0 cellpadding=0>
<form method=post enctype=multipart/form-data target='action_mlist'>
<tr><td>#!m.viewname;</td></tr>
<tr><td>#!m.list;</td></tr>
<tr><td>#!m.pagemenu;</td></tr>
<tr><td>#!m.m_remove; #!m.mboxselect; #!m.m_move;</td>
<td>메일:#!m.mails;</td><td>#!m.querybox; #!m.m_list;
</td></tr></table>
<iframe src="about:blank" scrolling=no frameborder=0 height=0 width=0 name="action_mlist"></iframe>
</body>
```

Webmail View Filter

Email view filter is used for reading the email.



Below is the summary of the email view filter.

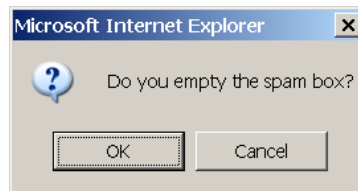
```
<link href="/segio/mail/mail.css" rel="stylesheet" type="text/css">
#!m.viewname;
<table width=100% border=0 cellpadding=0>
<form method=post target='action_mview' enctype='multipart/form-data'>
<tr><td>
    <table width=100% border=0 cellpadding=0>
    <tr><td>
        #!m.m_reply,Reply; #!m.m_forward; #!m.m_print,Print;&nbsp;#!m.m_up; #!m.m_list; #!m.m_down;
    </td><td align=right>
        #!m.m_remove; &nbsp;#!m.mboxselect; #!m.m_move;
    </td></tr></table>
</td></tr>
<tr><td width=20% class=cell4name>Subject:</td><td width=80% class=cell4value>#!m.subject;</td></tr>
<tr><td width=20% class=cell4name>From</td><td width=80% class=cell4value>#!m.from;</td></tr>
<tr><td width=20% class=cell4name>To</td><td width=80% class=cell4value>#!m.to;</td></tr>
<tr><td width=20% class=cell4name>CC</td><td width=80% class=cell4value>&nbsp;#!m.cc;</td></tr>
<tr><td width=20% class=cell4name>BCC</td><td width=80% class=cell4value>&nbsp;#!m.bcc;</td></tr>
<tr><td width=20% class=cell4name>&nbsp;#!m.file;</td><td width=80% class=cell4value>&nbsp;#!m.mboxselect; #!m.m_move;
</td></tr>
<tr><td colspan=2 class=cell4context>
#!m.context;
</td></tr>
</td></tr></form></table>
<iframe src="about:blank" scrolling=no frameborder=0 height=0 width=0 name="action_mview"></iframe>
```

Webmail Menu Frame

Menu frame of web mail can be structured as below to add emptying function on Spambox and Trashbox.

```
<body bgcolor=
<style>.cell4foldername { padding='2,0,1,20';font-size:8pt;} </style>
<table border=0>
<form method=post target=action_menu enctype=multipart/form-data>
<tr><td>#!m.compose;</td></tr><tr><td>#!m.sentbox;</td></tr>
<tr><td>#!m.inbox; &nbsp;&nbsp;&nbsp;(&#!u.newmail;)</td></tr>
<tr><td>#!m.spambox;</td></tr>
<input type=image name=act_cleanspam src="/segio/mail/empty_mbox.gif"align=absmiddle onclick="event.returnValue=confirm('Do
you empty the spam box?');"> </td></tr>
<tr><td>#!m.trashbox;
<input type=image name=act_cleantrash src="/segio/mail/empty_mbox.gif" align=absmiddle onclick="event.returnValue=confirm('Do
you empty the trash box?');"> </td></tr>
<tr><td>#!m.userboxes;</td></tr>
<tr><td><input name=newbox value=" style=border-style:outset;border-width:1px;></td></tr>
<tr><td>#!m.mysetup;</td></tr> <tr><td>#!m.mymailbox;</td></tr>
<tr><td>#!m.address;</td></tr> <tr><td>#!m.myfolder;</td></tr>
<tr><td>
&#!if l.lv>8; .... Webmail management tool ... &#!fi;
</td></tr></form></table>
<iframe width=0 height=0 name=action_menu frameborder=0></iframe>
```

Trashbox and Spambox are provided with ‘Empty’ function which deletes all letters inside. When click the “Empty” button, the dialog box as below is displayed. If click the “submit” button, execute the deletion and if click the “cancel” button, then stop the deletion.



Default structure of menu frame uses "<form>~</form>" syntax and input tags of several submit format are included. When creating personal mailboxes or emptying the Trashbox or Spambox, iFrame was used for posting purpose.

Below is the original document of the management menu included in the menu frame.

```
<script language="JavaScript">
<!--
function admin_page_change(Select) {
    idx=Select.selectedIndex;
    if(idx>0){
        str=Select.options[idx].value;
        if(str.length>1)top.m_body.location.replace(str);
    }
    Select.selectedIndex = 0;
}
-->
</script>
<select name=admin_menu onChange="admin_page_change(this);" style="width:165">
    <option value="">Webmail configuration </option>
    <option value="">-----</option>

    <option value="#!m.href.setup;">Webmail</option>
    <option value="#!m.href.spam;">Spam </option>
</select>
```

Definition folder of the mail box in menu frame shows the list of the folder which is managed by the user and it is constructed by the `<table>~</table>` tag. Webmail icon is used together with board icon which is assigned in configuration.

“#!m.userboxs;” is replaced as the list of user’s mail box. List of the user definition mail box is displayed as below table type.

```
<table>
<tr><td class=cell4foldername><a href=... target=m_body>Friends1</a></td></tr>
<tr><td class=cell4foldername><a href=... target=m_body>Friends2</a></td></tr>
<tr><td class=cell4foldername><a href=... target=m_body>Friends3</a></td></tr>
...
</table>
```

Talbe’s cell is assigned as “class=cell4foldername” and change the talbe cell’s characters by using the “`<style> ... </style>`” tag syntax.

List of the mail folder made by user in menu frame adopt the below icons.

/icons/mbox_list.gif	Icon before the general mail box in "#!m.userboxs;" list
/icons/mbox_last.gif	Icon at last mail box in "#!m.userboxs;" list
/icons/mbox_spam.gif	Icon before the spam mail box
/icons/mbox_in.gif	Icon before the received mail box
/icons/mbox_sent.gif	Icon before the sent mail box
/icons/mbox_user.gif	Icon before user definition mail box
/icons/mbox_temp.gif	Icon before temporary save box

Two icons use the shared web resource. If you want to replace them to others, you make place them in “html/icons/file” of each IntarCell.

```

<style>
.cell4foldername { padding-left:4px;font-size:12pt; }
</style>
<table border=0 cellpadding=0 cellspacing=0>
<tr><td style=padding-left:10px;>
#!m.userboxes;
</td></tr>
<tr><td style=padding-left:30px;>
<input name=newbox value=" style=border-style:inset;border-width:1px;width:80px;>
</td></tr></table>

```

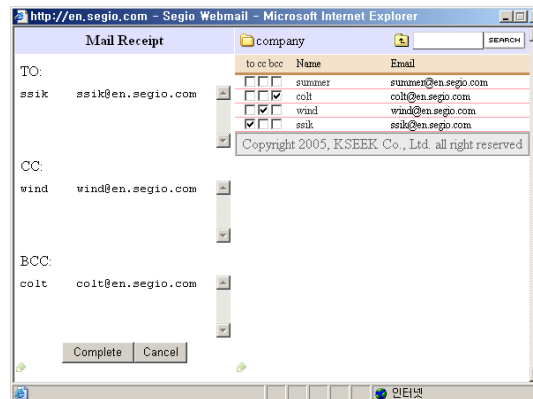
Below is the real example images of the menu frame.



The icons on the left hand side of the icons customer, develop, friends and others look like they have a solid line on each of them and this icon is "mbox_list.gif". The winbox icon is the last one on the list and "mbox_last.gif" is connected to the last so the line connection is a little bit different. If you enter the mailbox you want to create in the blank field at the bottom then click Enter to create a new mailbox right away.

Address Search

When sending an email, you can search the address book to select the recipient(To), referral(cc) and blink referral(bcc). Below is the pop-up window provided for address search.



Frame is divided into two as in above image, each is setup by filters of "addr_rcpt.html" and "addr_browse.html" respectively, which are dedicated to mail only. Below is a summary of "addr_rcpt.html".

```
<title>SEGIO Web mail </title>
<script> <!-- Javascript summarization -->
function set_rcpt_value(no,sss)
function set_mail_address(form)
function remove_from(ele,vstr)
function refresh_view(ele,sss)
function refresh_list(val1,val2,val3,val4)
function refresh_views()
function terminate(form)
function terminate_nothing()
</script>

<body bgcolor=#FFFFFF>
<table border=0 cellspacing=0 cellpadding=1><form name=form>
<tr height=30><th bgcolor=#e0e0FF class=outset1>
메일 수신
</th></tr>
<tr><td>
<table width=100%>
<tr><td class=none style=padding:3;> TO: </td></tr>
<tr><td>
<input type=hidden name=tos value="> <textarea name='to' readonly></textarea>
</td></tr>
<tr><td style=padding:3;> CC: </td></tr>
<tr><td>
<input type=hidden name=ccs value="> <textarea name='cc' readonly></textarea>
</td></tr>
<tr><td style=padding:3;> BCC: </td></tr>
<tr><td>
<input type=hidden name=bccs value="> <textarea name='bcc' readonly></textarea>
</td></tr>
<tr><td align=center>
<input type=button name=ending value="Complete" onclick="terminate(this.form);">
<input type=button name=cancel value="Cancel" onclick="javascript:terminate_nothing();">
</td></tr></table>
</td></tr></form></table>
```

Java script is closely related to the contents layout therefore HTML alteration is allowed with attributes (name or id) of each structural unit are maintained. Java script is linked to call the Java script of edit filter of email therefore it is not recommended to make changes. Below is the summary of "addr_browse.html".

```

<script language="Javascript1.2">
function check_all(th)
function form_check(tform,th,ino)
function init_check(no,sss)
function initialization()
function refresh_list(istr,sub)
</script>
<body onLoad="javascript:initialization();">
<table width=100% border=0 cellpadding=0 cellspacing=0>
<form name=form target=action_addrbrowse method=post>
<tr height=30><td>

<table width=100% border=0 cellpadding=0 cellspacing=0 height=30>
<tr bgcolor=#e0e0FF><td width=20 align=center><img src=/icons/file/dir.gif border=0></td>
<td>#!addr.viewname;</td><td align=right>
<table><tr><td width=20 align=center>#!addr.m_top;</td>
<td><input name=query value="#!addr.query;" ></td>
<td>#!addr.m_seek;</td>
</tr></table>
</td></tr></table>

</td></tr><tr><td>
#!addr.list;
</td></tr></form></table>
<iframe src="about:blank" frameborder=0 height=0 width=0 name="action_addrbrowse"></iframe>
<table width=100% ><tr>
<td align=center>Copyright 2005, KSEEK Co., Ltd. all right reserved</td>
</tr></table>
</body>

```

"#![];" syntax of content is the insertion of the result executed by execution file of web mail. Web design is changeable in “style” assignment method created by execution part of web mail. Java script included is closed related to the execution part of HTML therefore it is recommended not to modify as much as possible.

D. User management Items

Webmail user can manage the user configuration and user address book.

User Definition Mail Box

Webmail user basically have the Inbox, sentbox, trashbox and spambox and in his need add the mailbox. Below is the Mail box management tool.

 Inbox	2	24K	
 Sentbox	8	56K	
 Spambox	1	20K	
 customer	 REMOVE 0	16K	
 develop	 REMOVE 0	16K	
 friends	 REMOVE 0	16K	
 winbox	 REMOVE 0	16K	
			

If you enter the mail box name and click the button, the new mail box is created. In mail box name, except special charaters as like the dot(.), slash(/) and quotation mark(“”), Korean, Japanese or Chinese are able to use.

User Configuration

Registered User in IntraCell can construct the lower community if he has the private homepage and then management tool for webmail and configuration. “My Home Setup” is omitted because it is the private communit configuration and we explain the “My Mail Setup”

My Mail Setup

Reply to

Mail Character set

Mail Name

Switch Option

☐ Forward
☐ Spam Filtering
☐ From to Board
☐ From to Mailbox

Auto Remove

Spambox

00

Day(s)

Trashbox

00

Day(s)

Forward

Signature

Signature *

From to Board

Sender Address

Subject Head

Target Board

From to Mailbox

Submit

Reset

Below is explanation of the main configuration items.

Field Name	Explanation	Remark
Reply to	Reply address except sender address	Reply-to:
Mail Character Set	Kind of character set	
Switch Option	Forward, Spam filtering, from to board, from to mailbox Selection	
Auto Remove	Set the period of the spam box and trash box	
Forward	Forwarding address. Available multiple email address	.forward

If select the forward function, the all mails are resending to the the forwarding email and do not save in his mail box.

“From to Board” function save the email to board when the sender address and title is satisfied. If send the email which is started with title,”[Digital picture]” and attatehd picture, then it can be moved automatically to the specified board. Sender address must be one in one line and also the title. In case that two line is ture at the same time, then the mail is moved to the board. In case that the mail save to the board, spam mail is saved in deleted condition.

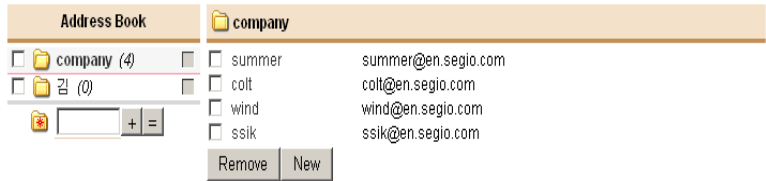
“From to Mailbox”is the function that save the email to specified mail folder by branching the email as the sender email. Only in case that the email must be the sum of “@” and domain address”like “@en.segio.com”, the mail is received to the specified folder. If the mail is the sum of “Uid” and “@” like “summer@”, then only refer the id and save the specified mail folder.

Spame filtering engine defined the mail as spam mail when there is the syntax error of the MIME-type. If you want to receive the mail which is defined as the spam mail, it is saved when you use the “From to mailbox” and define the webmain and inbox.

Even so you configure the forward, From to board and from to mailbox, if there is no checked switch optios, they are not operated.

Searching the address management

When send the mail, assign the To, CC and BCC by searcing in the address book. All webmail users have the address book of themselves. Below is the management screen of the address book.



If you click the “+”after enter the folder name in left side, the address folder is created. “=” is the option that change the folder name. After selecting the empty folder or check box in left side and click “Remove” button, then the selected data was removed. The removed data is unable to recover. Below shows the address registration form. Address registration form support the function that modify the existed registration address, register the new address and register the new address when read the email. New registration can be done by clicking the “New” button and when you read the email, you can register it by clicking the period(.) of the tail of the email address.

Name	company
Email	
Phone Number	
FAX	
Organization	
Zipcode	
Address	
Note	

Submit Reset Cancel

If you register the new email with above form, it shows continuously to input the address. If you edit the registered address, window is closed after submit.

E. Spam Filtering Configuration

After the email is used by all kind of users, the case that emails are used for advertisement for increasing the sales are increasing and the people who has the stress with them are expanding. SEGIO support the simple level spam filtering function. Each IntraCell filter the spam mail with combination of the keyword and web mail engine divide the webmail as the spam with searching the complicated grammar. Below is the key word combination tool of the intranet email.

Spam Setup	
Subject	Free Hello
Sender	marketplace@elancer.co.kr geopie@geopia.co.kr email@email.mk.co.kr webmaster@i-biznet.com adver@inaus.co.kr gold@hnet.co.kr m48thzz@dreamwiz.com pe12939432fjdjst@yahoo.com
Receiver	
Context	Marketing
File Name	readme.zip text.zip test.zip

Submit Reset

Upper image is showed only to IntraCell administrator(9 level). As shown in image, with key words in items of subject, sender, receiver, context, file name and etc, spam was filtered. Each items are only differ in field, but spam key word condition operate same.

Spam key word should be written only by one at one line. Each spam condition keyword is configured over 1 key word. Keyword divide as “keyword” type and spam condition is satisfied when each word is included. Each keyword is possible to combile the multiple keyword by OR() operator.

If the various keywords are aligned, each keyword satisfy the including condition and also the order of the keyword. If you want to filter without order, you attatch the underline(_) before the keyword. Below is the example of the spam keyword.

Example1) “English|Japanese|Chinese|” “_Foreigner|Free|Telephone”

Example2) “English|Japanese|Chinese|” “Foreigner|Free|Telephone”

Example 1 regard it as the spam regardless of order if there include the only one in two group of keyword.

Example 2 regard it as the spam when there include the over one among two sides key world group and the order is correct.

Spam mail configuration condition is saved as specified file type. If you edit it directly, it do not operate properly. If you apply the spam filtering function, you should restart the related web daemon. But if you configure with the web management tool, it will operate at the same time.

<http://www.segio.net/>



3rd Floor, 1191 Dunsan-Dong Seo-gu
Daejeon Republic of Korea
Tel : +82-42-485-7114, 7144 Fax : +82-42-482-7995
<http://www.kseek.com/> E-mail : support@kseek.com