RAP Clientless SSL Web Portal

Administrator Manual





Remote Access Pass	Version:	6.0
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1. Introduction

This Server Administration Manual will explain the web-interface of the RAP (Remote Access Pass) Server Administration Console to set-up, enable, and manage the RAP service by the server administrators so that RAP users have a functional and reliable interface for access to their registered computers. Before we go to the details of the manual for the RAP administration, let us first get familiar with what RAP is and how it is working.

The RAP allows RAP users to remotely control their registered computers. In addition the RAP will enable your users to gain remote access to their remote files, directories, and applications with any internet-ready PC.



Figure 1: The Application Login Page

Figure 1 shown above is the primary **end-user** interface obtained from the RAP server after a secure log-in. From this screen the user may make several requests and changes to personal information on the central site server. Following figure 2 shows the application main functionality page to make some concept to manage it for RAP administrator.

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Control of Con	File Edit View Favorites Tools Help	🔽 Go 🖟 🏠 Bookmarks 🛛 🔊 1144 blocked 🏰 Check 👻 🔨 AutoLink 👻	🗐 AutoFill 🍺 Send to 👻 🔏		📆 🔹
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Applications & Managements Tools Image: Complete Start Tellnet& SSH MS-TS FTP Email Remember: Click "Logout"Close the brower(s) to securely end your session after you are finished	Remote Access Internal WEB Server	Internal Computers Remote Accessing			
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		Remember: Click "Logout"Close the brower(s) to securely end your session af	ter you are finished	Copyright © 2002-2006 Helm Systems Corp. All Rights Reserved.	*

Figure 2: Application Main Page

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2. RAP Server Administration System

2.1 Login

The RAP Server Administration system is administered from a trusted IP address (if specified) and a unique User ID and password. The 8802 port is default used as admin console port. The initial UserID and Password are "Admin" and "helmsys".

Login uses HTTPS to send a User ID and password that may be changed through a predetermined management port also protected by the definition of a trusted IP domain and network mask settings. User ID is case-sensitive and may begin with a letter or number, though spaces and special characters are not allowed.

🖉 R A P Administrator Console - Windows Internet Explorer			_8×
So So V 🖉 https://69.104.183.156:8802/servlet/AdmServlet?handler=Logout	💌 😵 Certificate Error	😽 🗙 Live Search	P -
File Edit View Favorites Tools Help			
Google C - Send to - Send			Settings •
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Remote Access Pass	BMETRY6		<u> </u>
rRAP Administrator Console			
Admin ID LOGIN_			
简体中文			
Copyright © 2002-2006 Helm Systems Corp. All Rights Reserved.			
Done		📑 💽 Internet	100% •

Figure 3: RAP Server Administration login interface

Only the correct User ID / password, directed at the correct port, and sent from the specified trusted domain will be granted access to the Admin console.

After login, a view with tabs (<u>System</u>, <u>Users</u> and <u>Targets</u>) for different management tasks will appear in the left-hand frame.

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3. System Manager

3.1 System Setting

The "<u>System Setting</u>" link on the System tab allows you to set the System IP, the Domain name, the Gateway IP, and the DNS IP. Proper configuration of the system is required for any operation. Once the system is functioning these settings should not have to be changed.

CAUTION: Once set up properly any changes to the system configuration or the server settings may disable the service.

TEM MANAGER >> System Settin	0		II Help II Log
SYSTEM MANAGER	Sustem and Naturals Configure	dina.	
System Setting Database Setting	System and network compare		
Cluster Setting	Senal NO.	58159672506350551841	
Route Setting	RAP Server Name	RAP	
Quota Setting	System IP	192.168.1.52	
Certificate Setting	Subnet Hask	255.255.255.0	
NUTHER PROPERTY AND INC.	Default Gateway	192.168.1.1	
AD INCOME AN INCOME	DRS	68 94 156 1	
Groups Manager Users Manager	Management Boot	6002	
Authentications	Franagement Port	loons C	
PCs Manager	Enable NAT	C Enabled * Disabled	
ADVANCED OPTIONS	Enable Proxy	(* Enabled C Disabled	
System Loop	Trusted IP	127.0.0.1	
Diagnose	Trusted Hask	0.0.0.0	
Dynamic DNS Administrator	Hail Server		
Password	Client Authentication	Disabled T Unlead root CA	
Customize UI			

Figure 4: System Configuration

Modify both "Trusted IP" and "Trusted Mask" to limit which IP or IP domain can access the admin console. ex. 192.168.1.50 and 255.255.255.254 to make 192.168.1.50 can access admin URL only.

Clicking the "OK" button on any tab sends the changes to the Central server.

NOTE: If Mail Server is setup, the user can get the temporary password from email when that user is added to RAP. Otherwise, Administrator need tell the temporary password to each new user following the info of display.

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3.1.1 Enable NAT

When RAP is deployed as bridge in the topologic of the internal network, you should setup the route to make connection work between different network interfaces. Select NAT "enabled". Since SSL delivery eliminates the NAT and firewall traversal issues encountered with traditional remote access products, allowing your remote users reliable and ubiquitous access from external networks are the biggest advantage for SSL. Using NAT is not a good solution of RAP.

3.1.2 Update Root CA for Two-way SSL

If the two-way SSL authentication is required, select the "Client Authentication" either "Enable" or "Want". And update the users root CA to click "<u>Update root CA</u>" link.

If the browser in the client side has a legal certificate match this root CA, then login RAP automatically even do not need to enter password.

Configure the file sysconfig.xml: Add tag parameter <CRL>"CRL server name"</CRL> that RAP retrieves the message from CRL to check if the certificate exists.

	n setting	# Help # Logout
System Setting Database Setting Duster Setting Policy Setting Nouce Setting	Upload root CA Certificate file	Browse
Quota Setting Servers Register Certificate Setting		ĸ
Groups Manager Jaers Manager Authentications PCs Manager		
DVANCED OFTIONS		
iystem Logs		

so

Figure 5: Update Root CA

3.1.3 Other Network Interfaces configuration

Click "<u>Configure Other Network Interface</u>" can view the all enabled network interfaces except the main interface in the "System Configuration" page.

Click each of the name of card link can modify the parameters of the interface

Elma.	Remote Access Pass	RIEUM SYSTEMS	- Remote Access Pass	WELM SYSTEMS
SISTED HARAGER >> Sp STED HARAGER Suban Status Baba S	een Sattrig Technoole Interfaces List <u>website in 1922 1663.552</u> 255.2555.255 DBC	E Heb i Lopoct	Stattber MANAGER >> System Safety * system MANAGER * system ManAGER <	EHAb & Loport
	Capyright @	2002-2007 Helm Systems Corp. Al Rights Reserved.		Copyright @ 2002-2007 Helm Dystems Corp. All Rights Reserved.

Figure 6: Other Network Interfaces Configuration

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3.1.4 Timeout Setting

Click "<u>Timeout</u>", can set the time following three kinds of sessions:

- 1. The RAP admin session time.
- 2. The RAP application session time.
- 3. The user applications can be accessed session time.

interview >> statistic	etting		#Help #Lo
System Setting	Timeout Setting		
Database Setting Cluster Setting	RAP Adm System Timeout	(ho	Hinutes
Policy Setting Route Setting	RAP Appl System Timeout	25	Hinstes
Quota Setting Servers Register Certificate Setting	Users Application Timeout	20	Hinutes
AUTHORIZATIONS	00	Back	
Groups Manager Users Manager Authentications PCs Manager			
Groups Manager Users Manager Authentications PCs Manager Any ANNEED OPTIONS			
Groups Manager Users Manager Authentications PCs Manager ADVANCED OPTIONS System Logs			
Groups Hanager Users Manager Authentications PCs Manager ADVANCED OPTIONS System Logis Degrose Administrator			
Groups Manager Liters Manager Adventications Pice Manager Advances Optimises System Logis Diagnose Advanses tor Password Customise UI Version Update			

Figure 7: Timeout Setting

3.1.5 System Time Setting

Click "System Time", can set the system time selecting from the calendar and clock.



Figure 8: System Time Setting

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3.2 Database Setting

Select a DB type for this RAP. The default DB type of single RAP is "Embedded".

- Embedded: use local DB and do not allow the other RAP access to this DB through network (do not allow modify the URL)
- Embedded Network Service: use the local DB and allow the other RAP access to this DB as a central DB (do not allow modify the URL)
- HSQL: The central DB is HSQL, replace the host from the specific IP address
- MYSQL: The central DB is MYSQL, replace the host from the specific IP address
- If uses other DB like Oracle, SQL Server, can ask the provider to initialize the DB using RAP's script files of the initial data. The URL can be edited in the URL field following the initialed format.
- External password encryption algorithm can replace default algorithm when you set the flag :
 - <EXTERNAL_CRYPTO_ALG>Y</EXTERNAL_CRYPTO_ALG>
 <CUSTOMER_CRYPTO_KEY></CUSTOMER_CRYPTO_KEY>
 in sysconfig.xml
 - ✓ Put external algorithm code in an jar file to folder /usr/apps/tomcat/shared/lib
 - ✓ The API must following: class name: com.amity.crypto.Encryptogram;
 - ✓ Function name:

String encryptOp(String input, String encrypt_key); boolean checkPassword(String clear_password, String encrypt_password, String customer_crypto_key).

	and second	# Hep Logo
SYSTEM MANAGER		
System Setting	Database Configuration	
Ouster Setting	Database Type Embodied	
Route Setting	Database URL dbc.hsgldb.file./usr/	
Servers Register	Lr	
Groups Manager Users Manager		
Groups Manager		
Authentications		
PLs Manager		
ADVANCED OPTIONS		
AvvAviatio controles System Logs		
ADVANCED OPTIONS System Logs Diagnose Administrator		
AVANCED OSTICAS System Logs Diagnose Administrator Password Customice UI		
ADVANCED OPTIONS System Logs Diagnose Advinists ator Password Customice UI Version Update		

Figure 9: Database Setting

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3.3 Cluster Setting

Check "Enable" in checkbox of the Cluster Setup and reboot RAP to make clustering enable.

3.3.1 Cluster

This RAP is a normal member in the cluster. Inputs the name of the domain of the cluster to make sure the message can be sent or received to the all members (same domain name) only in this cluster. Inputs the banded IP (normally the RAP system IP) that should be a physical IP as well as does not allow mapping IP makes communication using the port 8012 of this banded IP in TCP protocol between members within the cluster. The port 8015 of this banded IP in UDP protocol send message to every members.

There are different registered users in different RAPs when uses the cluster. For example: The user1 registered in RAP1. The RAP1 is down during the user1 login to the RAP1. The user1 can switches to the RAP2 automatically and does anything as same as in RAP1. The condition is the user1 must login to RAP1 first before user1 can login to RAP2.

3.3.2 HA

The two RAPs connect in the LAN using cluster mode can implement HA function.



Figure 10: Enable and Configure Cluster

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3.4 Policy Setting

You can add or delete policies to set the RAP has different levels protection. The policy setting is similar to configuration of policy of a firewall. "<u>Policy Setting</u>" feature corresponds to "Tunneling" server accessing mode.

Statistical Statistatistical Statistical Statistical Statistical Statistical Stati	Remote Access Pass	HELM SYSTEMS	Remote Access Pass	HELM SYSTEMS
Canvada 8 2003.2027 Math Strategy Canvad Canvad Canvad Canvad Reserved	system MAAADCB >> hikky Satting system Satting bytem Satting Cutater S	Copy Copy	STSTEMANAGES >> Delar Setting StratteMANAGES >> Delar Setting StratteMANAGES >> Delar Setting Parks Setting Parks Setting Parks Setting Adverse Register Adverse Regis	E Help & Loport

Figure 11: Policy Setting

When user sets the policy of firewall in the RAP box, such as open some ports (original setting to open 443, 80, 8802, 139, 445 ports). You can edit the script file to add the policy of firewall: /usr/apps/tomcat/data/default.sh.

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3.5 Route Setting

Add or delete static route tables to change the default route table.

Remote Access Pass	MEMS Remote Access Pass
	Logout STITU MANA/2R Effects Effects Education Education * STITU MANA/2R Status Mark Status Education Education Education * Status Status Status Education Education Education Education * Rests Status Status Education Education Education Education * Rests Add Roade Education Education Education Education * Rests Add Roade Education Education Education * Add Roade
Copyright © 2002-2007 Helm Systems Corp. All Right	lights Reserved. Copyright & 2002-2007 Helm Dystems Cop. All Rights Reserved.

Figure 12: View and Add a Static Rout Table

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3.6 Quota Setting

The "<u>Quota Setting</u>" all administrators watch what situation on current RAP system and three kind of limit quota number. When RAP need to add quota number, you can email to RAP customer support and get new secret string number.

Remote Access Pass	CLELM SYSTEMS	- Remote Access Pass	SMETTEMS
STISTEM MANAGER >> Quota Setting	# Help # Logout	SYSTEM MANAGER >> Quota Setting	# Help # Logout
STRTEM MANAGER Single Stating Could all stating C	Correctly Brainford Has, Alessed 3 00 1 09 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	System Setting Charless S	
	Copyright @ 2002-2007 Helm Systems Corp. Al Rights Reserved.	Copyright @ 2002-2007 Helm Systems C	Corp. All Rights Reserved.

Figure 13: View and Update Quota

When you get the new serial number from Helm Systems, you can click "Update Quota" to enter the new serial number to modify the maximum allowed concurrent users.

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3.7 Servers Register

- ✤ From the Servers tab, internal server types can be viewed.
- Select a server type, which can be added and deleted.

STEM MANAGER >> Server	s Register	II Help II Logo
SYSTEM MANAGER	- Server Type List	
System Setting Database Setting Ouster Setting	Web Server	
Policy Setting Route Setting	Exchange Server	
Servers Register Certificate Setting	Restricted Client/Server	
AUTHORIZATIONS	Generic Client/Server	
Groups Manager Users Manager	Network Tunneling	
Authentications PCs Manager	Telnet Service	
ADVANCED OPTIONS	SSH Service	<u>_</u>
System Logs Diagnose	FTP Service	
Administrator Password Customize LI	Terminal Service	
Version Update	POP3 Server	
REBOOT	IMAP Server	

Figure 14: The Internal Server Types List

IM MANAGER >> Servers)	Register		II Help	
YSTEM MANAGER				
system Setting	Web Server Li	st		
Natabase Setting		Server Name	Server URL	
Rolicy Setting Rolicy Setting Route Setting	Г	ERI.	http://192.168.1.30/index.htm?uid=% RAP_SS0_USER%&pwd=% RAP_SS0_PASSWORD%	
Juota Setting	Г	EIII_doct	http://192.168.1.30/ERI/	
Certificate Setting	Г	router	http://192.168.1.1/	
Troups Manager Joers Manager		Del	Add .	
Groups Manager Juers Manager Authentications ICs Manager		Deli	Add	
Groups Manager Jacob Manager Authentications FCs Manager Strayletic Option(3)		Del	fe A05	
Unit-Carlotte Broups Manager Martinitications Kis Manager QANACED CONTONS system Logs Approve Asprose Asprose Asprose Asprose Subtomet UI Subtomet UI Subtomet UI		Det	Add	

Figure 15: Servers List

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3.7.1 Web Based Server and MS Exchange Server for Web Server

Internal Web Servers is meaning internal web based application servers deployed in the LAN:

A selection can link a URL of web based application server in the servers list. User can click the "Go" button to connect this server.

3.7.1.1 WEB servers

There are two type web based servers:

- MS Exchange Outlook Web Access
- General web based server

3.7.1.2 Process for internal or absolutely URL in the page of server

- Extra Link: These internal URLs can be linked each other in this web server must be added this text area. (Each URL in the text area separated by "Return" one by one and these URLs do not display in the server list in application).
- It must add http:// or https:// prefix in text field of Server URL, when WWW type server is selected. The other servers just enter the IP address in the URL field.
- Exchange server configuration is similar Web server's

3.7.1.3 Process for URL register when SSO

• To make SSO usable, the server URL must be set following format:

<u>http://x1.x2.x3.x4/login_page</u> (<u>http://192.168.1.10/login.htm</u>) ?uid=%RAP_SSO_USER%&pwd=%RAP_SSO_PASSWORD%

3.7.1.4 Interface requirement for authentication in user side when SSO

• The login part of application server needs to set to authentication:

String userId = req.getParameter("uid");

String passwd= req.getParameter("pwd")

3.7.1.5 URL accessing control

 Filter and block the sub folders under the main URL using white list and black list. This is a pure application layer switch that controls accessing of applications in the intranet.

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- (K elm».	Remote Access Pass	SMETTEMS	Remo	ote Access Pass	HELM SYSTEMS
STITTEM MANAGER >> Serv STITTEM MANAGER System Setting Database Setting Database Setting Database Setting Database Setting Database Setting Database Setting Database Revolt Setting Database Servers Repair California Database Administrations Database Database Database Setting Database Setting Database Setting Database Da	Web Server Public Server Hame S	s Loport	Statist NUMACE SIX Servers Repaire Statist NUMACE System Setting Disbular Setting Disbular Setting Disbular Setting Disbular Setting Disbular Setting Catal Setting Servers Repaire Certificata Setting Authorizations PC/Minoper User Nanoper Setting Non- Setting Non- S	dd Dxchange Server Server Hame Corp_Mail Description Server UBL http://192.168.1.15 External Link Allowed UBLs Forbidden UBLs Torbidden UBLs Soft	E Heb T Lopout
	Copyright © 2002-2000 Helm System	e Corp. All Rights Reserved.		Cop	yright @ 2002-2008 Helm Systems Corp. All Rights Reserved.

Figure 16: Web Server and Exchange Mail Server

3.7.2 Applet to support well-known protocol

Telnet, SSH, MS Terminal Service, FTP, POP3 and IMAP set that server URL and ports. (JRE is needed to download automatically)

FTP service supports both passive mode and active mode

All above type of servers are set fixed IP



Figure 17: Telnet, SSH, MS-TS, FTP, POP3 or IMAP server

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3.7.3 Restricted Client / Server (Java Applet)

This is a good way to access the application of client / server:

- The application uses fixed ports only.
- Client side can be installed JRE (for fixed location is more better since it does not need to download and install JRE)
- The IP connection in the configuration of client software of user can be redirected

Server Port: only one port can be input. (JRE is needed to download automatically) Extra TCP Ports and UDP Ports can input more than one separated by ";"

Etma.	Remote Access Pass	CHEELEN SYSTEMS
SYSTEM MANAGER >> Set	vers Register	# Help 📕 Logout
STITCH MANAGE System Setting Duktobasis Setting Duktobasis Setting Duktor Setting Policy Setting Policy Setting Cubtor Setting Serves Register Contribute Setting Serves Register Controller Administrators Pica Manager Administrator Passioned Continue Update Version Lipidate Version Lipidate Setting Setting	Restricted Clent/Server Profile Server Hame Grob Description Server Part 100 Extra TCP Profs 100 Lotra TCP Profs 1000.453 UOP Ports 7777	
	Carya	ph @ 2002-2000 Helm Systems Corp. All Rights Reserved.

Figure 18: Restricted Client / Server

3.7.4 Generic (Layer3) Client / Server (Windows ActiveX)

When user tries to select this type service to access internal client/server application, it needs download and run a client side package. The taskbar of the remote PC display icon "E", Right click this icon select "Exit" to tune off this agent.

Besides support specific ports as well support dynamic ports application. This mode does not have to register any application IP or ports so that it supports and cases of TCP/UDP level applications. It only need to give "Allow" or "Forbidden" the phase of IP for TCP or UDP to make sure which protocol of the IP can be allow through RAP.

Format: <host>[/mask>]:[<port>][<port2>]

■ The switch of accessing Internet during remote C/S connection is built up

When uncheck the "Allow Internet Access" checkbox, Internet can be accessed when the agent is running.

When check this checkbox, only the IP allowed passing RAP can be accessed.

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The admin can pre-register the web based servers or some URLs of Internet line by line to allow user access them directly

Format: <display_name>=<url> (GOOGLE=http://www.google.com)

EM NAVAGER >> Servers P	legister		# Help # Logo
ISTEM MANAGER			
Contract Contract	Generic Client/Server Profile	,	
Database Setting		h	
Duster Setting	Servername	hest	
Policy Setting	Description	1	
Suota Setting	Allow Internet Access	9	
iervers Register		<host>[/<mask>]]<port>[-<port2>]</port2></port></mask></host>	100 M
Certificate Setting	Allowed Servers(T(P)	192.168.1.1:80	-
UTHORIZATIONS		192.168.1.30/255.255.255.0	<u>×</u>
	Forbidden Servers(T(P)		2
anoups Manager	Torona car a service of the service	1	2
whentications	Allowed Second (1998)	192.168.1.1:80	-
Cs Manager	Participation (and)	192.168.1.30:00	-
OVANCED OPTIONS	Forhidden Samuel (1998)		*
	romanoen server(our)	1	*
System Logs	Accessed Mich Convers	yahoo=http://www.yahoo.com	
Vdministrator	ALLESSES WED SERVERS	google=http://www.google.com	-
hassword			
Vestion/2e UI			
		UK Cancel	
REBOOT			
Administrator Password Dustowice UI Version Update		Cit Cancel	1

Figure 19: Generic Client / Server

3.7.5 Tunneling

This is an IP over TCP mode, which needs download both JRE and a small agent. When there is any application bellow TCP level need be accessed, this mode is a selection like IPSec VPN.

It does not need any specific port be configured on the firewall.

DHCP IP range set: Start IP, End IP, and Subnet Mask

TEM MANAGER >> Servers	Register	# Help # Logou
System Setting Database Setting Cluster Setting	Retwork Tunneling Profile Name opn	_
Policy Setting Route Setting Quota Setting Servers Register Cetificate Setting	Description Subnet 10 3.0.0 Subnet Hask 255.255.0.0	=
UTHORIZATIONS Groups Manager Users Manager Authentications FC Manager	Dets [10.3.0.1 wates [10.3.0.1 Suffix [10.1.0.0]	
WAAVALED CARTICALS System Logs Diagnose Administrator	255.255.0.0 pt DX5:10.3.0 Route r1 CDIC:\\Seng\e5:\\Seng\ Logon Wfengle5:\\fenglc5	-1n ¥IX5:10-3-0-1
Tassword Dustomize UE Version Update	OK Carcel	•

Figure 20: Tunneling

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3.8 Certificate Setting

3.8.1 Sets Server Certificate

Update a new certificate to the RAP server. The user can upload a exist certificate as well as generate a new certificate. The new certificate is stored in Key Store: vpstore and load it from local PC to the RAP

ng Update Server Certificate	Help	Logo
Update Server Certificate		
Upload JKS Keystore		
Upload PFX Keystore		
Upload Certificate Files		
Create New Certificate		
The CRL Issuer DN criterion Setting		
Upload Cert criterion File		
	Upload JKS Keystore Upload PFX Keystore Upload Certificate Files Create New Certificate The CRL Issuer DN criterion Setting Enter CRL DNs Upload Cert criterion File	Upload JKS Keystore Upload Certificate Files Create New Certificate The CRL Issuer DN criterion Setting Enter CRL DNs Upload Cert criterion File

Figure 21: Update Certificate

Remote Access Pass	HELM SYSTEMS	- Keime.	Remote Access Pas	s (Helm Systems
STOM MANAGE >> Certificate Certificate Surger Singe Catalase Catalase	E lopiererdatav Brows.	STITUTH MANAGER >> Col STITUTH MANAGER Strang Status Statu	Shada Sering Create New Certificate Organization Unit Organization Unit Organization State (Province) Country	Image: second
	Copyright @ 2002-2007 Helm Systems Corp. All Rights Reserved.			Copyright @ 2003-2007 Helm Dystems Corp. All Rights Reserved.

Figure 22: Upload and Create Certificate

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3.8.2 Sets CRL Search Criterions

Inputs Issuer DN(s) or uploads the certificate .cer file(s) that include issuer DN issued by user to search the CRL{s} located in the non default node in the LDAP server when enable both TWO-WAY SSL and CRL checking.

ELM»	Remote Access Pass	ELM»	Remote Access Pass	CHELM S	RA	REN
> SYSTEM MANAGER >> Co	tificate Setting # Help # Logout	> SYSTEM MANAGER >> Ce	rtificate Setting		# Help	Logout
SYSTEM MAAACAR System Setting Outsides Setting Policy Setting Flock Setting Flock Setting Certificate Setting Certificate Certific	The CRL Issuer DN criterion Setting ISSUER DN Please uses the " "character to separate each of them when needs to input mulpie distinguished names.	SYSTEM MANAGER System Setting Debalses Setting Clubter Setting Clubter Setting Reverse Setting Clubter Setting System Setting Sy	Upload Disted Certificate Certificate File Upload Certificate File(s) List File Name Individer_11:04-15-21-35-05.cer	Browse	iize 07	

Figure 23: Input ISSUER DN or Upload Certificate include ISSUER DN of user

- The DN inputted must follow X500Name format, For example: CN=RAP, O=helmsys Each DN must be separated by "l" when inputs multiple DNs to support multiple CRLs.
- Upload .cer certificate file(s) that included ISSUER DN issued by user if the ISSUER DN inputted does not match the user issued DN.

Multiple CRLs mode is supported after upload multiple .cer certificate files.

The file(s) selected can be deleted.

The ways above can not be used at same time!

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4. Authorizations

4.1 Groups Manager

- ♦ Groups List: Admin can add a new group or delete a group and display the groups list
- Modify Group Data: Make it enable or disable.
- Enable or disable the File Sharing functionality.
- Enable or disable the Remote Control desktop functionality.
- Enable or disable the other well known protocol applications such as Telnet, SSH, FTP, MS Terminal Service and Email (transfer native protocol to http protocol) functionality.
- Click "<u>Customize</u>" to set accessing servers right for this group
- Click "<u>Add User to Group</u>" to add users from current user list to this group



Figure 24: Groups List and Group Data

RIZATIONS >> Groups	Manager		= H
TEM MANAGER			
stem Setting	Access Server Privil	leges	
tabase Setting ster Setting	Г	Server Name	Server Type
cy Setting	9	Demo1	FTP
a Setting	17	Demo1	TERMINAL_SERVER
ficate Setting	2	ERI	www
TZATIONS	17 I	ERI_docs	www
	9	Helm_Mail	POP3
Manager Tanager	7	dealbeeper	www
tications .	9	helm_tel	TELNET
	2	helmsys	SSH
ab ornors	9	linux	SSH
Logs	9	moscow	55H
trator	9	router	www
ize UI	17	techbargains	www
pdate	9	test	GENERIC_CS
	2	vpn	VPN
	9	web	CLIENT_SERVER
	9	webmessenger	www

Figure 25: Access Servers Privileges

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4.2 Users Manager

4.2.1 Users List

- The Users tab shows all registered users within the system. Ten User IDs and User names are shown at a time. Additional pages of users may be viewed by selecting the page number links at the bottom the page.
- Enter User ID in the search field to find the target user and gets the user profile.

ORUZATIONS >> Users Man	ager					# Help
STEM MANAGER						
stem Setting	UserLi	at				
stabase Setting	Entr	r User ID:		Ge		Set Filter
alicy Setting				1.1		
sute Setting	Г	User ID	Full Name	User Type	Authentication	Computers
uota Setting ervers Register	Г	Admin	Admin	н	LDAP	0
ethicate Setting	Г	Frank- Clent-1	Frank-Client-1	н	DB	0
THORIZATIONS	Г	RB	Robert Brandle	S[cyw]	DB	0
oups Manager	Г	C)W	cy wang	н	DB	1
ers Manager	Г	che	CZW	н	DB	0
La Manager	F	(Bu)	filu	н	DB	0
NAMED OFFICES	Г	ы	Kerry Lai	н	DB	0
Indiana Controla	E	rbrandle	Bob	н	DB	0
stem Logs agnose	F	trees des	Chengyi Wang	S[vps]	DB	0
dministrator	Ē	ush	unb	H	DB	0
browers	-			-		
rsion Update					P	MGE(1 of 2): 1 2
assword astonize UI asion Update					P	MGE(1 of 2): 1 2

Figure 26: User Manager

- Click "<u>Delete</u>" to delete the users who had been selected in the check boxes.
- Click "<u>Add</u>" to add a new user who can receive a welcome email.
- Click "<u>Export</u>" to backup all the users' information in the database to a saved file.
- Click "<u>Online User</u>" to monitor the users who are using RAP system as well as can enforce to interrupt the users current connections.

- KELM».	Remote Acce	ess Pass	olecci	I SVETENS
AUTHORIZATIONS >> Users	Manager			# Help # Logout
* SYSTEM MANAGER				
System Setting	Online User List			
 Database Setting Cluster Setting 	F	User ID	Login IP Address	
 Policy Setting 	Г	vps	75.6.224.202	
Route Setting Ousta Setting				
Servers Register		Lo	goutUser	
 Ceroncate setting 		_		
AUTHORIZATIONS				
· Groups Manager				
Users Manager Authentications				
PCs Manager				
ADVANCED OPTIONS				
 System Logs Diagnose 				
# Administrator				
Password Customize Lf				
· Version Update				
REPORT				
MINOCTURE N				

Figure 27: Online User Monitor

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Click "<u>Set Filter</u>" to select a category and type keyword in the field in the filter page to display sorting by grouping.

- K elm».	Remote Access Pass	HELM SYSTEMS	Remote Access F	ass Metrove Meer
AUTHORIZATIONS >> UM - STETM MARACER - STETM MARACER - Stevens String - Databas Setting - Databas Setting - Databas Setting - Databas Setting - Set	set User Filter User ID Group Rame Phone Final User Type Status	I Heb Lopox	ALTHOUGHTOCO >> Livers Measor • STETEM MANAGER Solvers Setting Classifier Setting Classifier Setting Classifier Setting Classifier Setting Classifier Setting Classifier Setting Classifier Setting Classifier Setting Classifier Setting • Attended Setting	Breb BLoport Go Clear Filter Tuff Reme User Type Anthenication Computers Admin H LDAP 0 Add Egott Celdre User
	80.	Copyright © 2002-2907 Helm Systems Corp. All Rights Reserved.		Copyright © 2002-2007 Helm Systems Corp. All Rights Reserved.

Figure 28: Search in Category

4.2.2 User Profile

Selecting a specific user link shows the registered Full Name, E-mail address, Mobile Number, Enable/Disable account toggle check boxes and the number of registered target computers. Any changes to the fields are made when the OK link is selected.

JTHORIZATIONS >> Users Manager			# Help # Logos
SYSTEM MANAZER	Modify User Profile		
Ouster Setting	User ID	vps	
Route Setting	Full Name	hps	
Quota Setting Servers Register	Email	support@helmsys.com	
Certificate Setting	Hobile	13641381130 Enable Hobile Aut	entication
AUTHORIZATIONS	Expiration	(0007-885-00)	
Groups Manager	Account	Enable Disable	
Users Manager Authentications	User Group	Hember Of	
PCs Manager	Num. of hosts	1	
ADVANCED OFTIONS	Hardware Binding	C Enable C Disable	
System Logs Dorgrose Administrator Password Customee UI Version Lpdate REBOOT SHITDOWN	Delete Rese	Password OM	Cancel

Figure 29: Modify User Profile

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To reset the password for an individual user, select the User ID link for the user who requires the reset and then use the link to "Reset Password", An automatic e-mail notice

will be sent to the end-user or display on the next page with the newly reset password randomly generated by the server.

- User Profiles may be deleted from the system by checking the boxes in the left-hand column and then selecting the Delete link at the bottom of the column.
- Click the "<u>Member Of</u>" link, to assign the user to groups

				# Help
M MANAGER				
Setting	Add User to	Group		
ase Setting	F	User ID	UserName	
Setting	E E	Admin	Admin	_
Setting	E E	Frank-Client-1	Frank	_
Setting s Register	F	RB	Robert Brandle	_
ate Setting	Г	CVW .	Cy wang	_
RIZATIONS	7	flu	flu	_
	Г	ы	Kerry Lai	_
fanager	F	rbrandle	Bob	_
tications	Г	sub_user1	Chengyi Wang	
and the second s	E F	usb	usb	_
CED OPTIONS	17	vps	vps	
Logs				
se strator			PAGE(1 of 2): 1 2
ard				
ice UI		0	K	
DT				

Figure 30: Assign user to groups

Selecting a link from the Computers column will display the computer(s) registered to the user in the row selected. The User Name, Host ID, and the Host name are displayed. Subsequently selecting the Host ID displays the Target Computer Profile in the left-hand frame. The system administrator can make no changes except deletion to the Target Computer Profile. The user may modify this information from the "User Profile" link on the "Main Page" page.

- KELM».	Remote Access Pass	HELM SYSTEMS	ELM».	Remote	e Access Pa	55	HELM SYS	BMEN
AUTHORIZATIONS >> Use	ns Manager	# Help # Logout	AUTHORIZATIONS >> PCs	Manager			# Help	Logout
SYSTEM MANAGER System Setting	Target Computer List		SYSTEM MANAGER	Targ	pet Computer Profile			
 Database Setting Ouster Setting 	F Host ID Host N	ame	 Database Setting Cluster Setting 		ID	1234567951		
Policy Setting	T 1234367951 EVERFAST	COMP1	Policy Setting		Owner ID	cyw		
Quota Setting			Quota Setting		Owner Name	cy wang		
Servers Register	Delete		Servers Register		Description	EVERFAST_COMP1		
			Contractor Second		Created On	2006-09-23 04:57:21		
AUTHORIZATIONS			AUTHORIZATIONS	l	Last Hodified On	2006-11-11 03:12:49		
Groups Manager Users Manager Authentications PCs Manager			Groups Manager Users Manager Authentications PCs Manager			Return		
ADVANCED OFTIONS			ADVANCED OPTIONS					
System Logs Diagnose Administrator Password Customize UI Version Update			System Logs Diagnose Administrator Password Customize UI Version Update					
K REBOOT			REBOOT SHUTDOWN					
	Copyright	8 2002-2007 Helm Bystems Corp. All Rights Reserved.				Copyright I	8 2002-2007 Helm Systems Corp. All Re	pts Reserved.

Figure 31: The User Own Target Computer

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4.3 Extra Authentications

- ✤ Admin can select authentication type which user used
- Select a certificate from USB KEY certificates list when enable local database user authentication if require specific certificate.

INDRUGATIONS >> Autom	Scations		Help 📕 Logo
System Setting Database Setting Cluster Setting Route Setting Route Setting Quota Setting	User Authentication Type Enable local database authentication D8 Extra Authentications	Load Duta from User DB	
Certificate Setting AUTHORIZATIONS	Select a type of USB Key	Enable Hardware Binding	
Groups Manager Users Manager Authentications PCs Manager	Configure \$50	© Enabled () Disabled	
ADVANCED OPTIONS System Logs	trable LDAP authentication	Cooligere LDAP	
Dynamic DNS Administrator Password	Enable RADIUS authentication	Configure RADIUS	
Version Update	Enable RSA SecurID authentication	Configure RSA SecurID	

Figure 32: Extra Authentication Types List

4.3.1 Pre-load User Data from a Text File to DB (Provisioning)



Figure 33: Import User Data from a Text File to DB

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4.3.2 MS Active Directory Authentication and Pre-load User Data

Input the URL of the page of the changing user password of the AD server to make user can change their password in AD server through RAP directly.

When load the user data from AD server to local DB, the user authentication type can be assigned depend on the different cases.

ELM?.	Remote Access Pass	SVEVENS	». Remote Access Pass	HELM SYSTEMS
AUTHORIZATIONS >> Aut	therritications	# Help # Logout AUTHORIZATIONS >	> Authentications	# Help 📲 Logout
System Advances System Setting Catabase Setting Catabase Setting Parks Setting Route Setting Route Setting Route Setting Cateflicate Setting Advances Manager Advances Manager Advances Manager Advances Manager Advances Manager Advances Manager Systems Logical Diagnoses Advances Advances Cateflicate Setting Diagnoses Advances Advances Advances Cateflicate Setting Diagnoses Advances Advances Cateflicate Setting Diagnoses Advances Advances Advances Cateflicate Setting Diagnoses Advances Advances Cateflicate Setting Diagnoses Advances Advances Advances Diagnoses Advances Advances Diagnoses Advances Advances Diagnoses Advances Advances Diagnoses Advances Advances Diagnoses Diagnoses Advances Advances Diagnoses	Configure Active Directory Active Directory Server IP Domain Rame AD Change User Passener Page URL F* Allow new uncer login OK engont User	 STATE MARKET System Setting System Setting	Import Active Directory User Server Login ID Passand Assign User Type (* Act	ber Denotory C Local DB
	Copyright & 2002-2007 Helin Systems	s Corp. All Rights Reserved.		Copyright @ 2002-2007 Helm Systems Corp. All Rights Reserved.



4.3.3 LDAP Authentication and Pre-load User Data

Input the URL of the page of the changing user password of the LDAP server to make user can change their password in LDAP server through RAP directly.

When load the user data from LDAP server to local DB, the user authentication type can be assigned depend on the different cases.

- When require extra authentication of the certificate both stored in LDAP server and USB Key, It needs to add a attribute in sysconfig.xml file located in /usr/apps/tomcat/data/.
- Make local DB authentication enable and select a USB Key supported.
- The format of attribute in sysconfig.xml is <LDAP CERT_FILED="field name of certificate stored in LDAP" /> to enable this feature, and restart system.

- KELM».	Remote Access Pass	EMBITERS	Remote Access Pass	CLEUM SYSTEMS
AUTHORIZATIONS >> Au	dhen Scations	Help Logout AUTHORIZATIONS >>	Authentications	# Help 🖬 Logout
SISTEM Monitorial Sistem Setting Code and setting Code	Configure LDAP LDAP Server IP LDAP Server IP LDAP Server port JDD Rate DH LDAP Change User Passound Page URL DAP Change User Passound Page URL OK Report User	 signal MAMARE signal MAMARE signal Marka Ring Stating Ring Stating Ring Stating Advectable Stating Advectable Stating Advectable Stating Advectable Stating Advectable Stating Advectable Stating Ring Stating	Import LDAP User Server Login 3D Passend Bare 08 3D Feld Mane Email Field Assign User Type	Fund For Cased DB
	Creavight @ 2002-3008 Helm System	ms Corp. All Fights Reserved.		Copyright @ 2002-2007 Helm Systems Corp. All Rights Reserved.

Figure 35: LDAP Authentication and Pre-load User Data

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4.3.4 RADIUS Authentication

ORIZATIONS >> Authentic	atons		# Help # Log
ystem Setting adabase Setting laster Setting dute Setting oute Setting oute Setting oute Setting meners Register artificate Setting microsoft Setting set Manager set Manager	Configure RADBUS RADBUS Server IP RADBUS Server port Shared Secret Authentication method	192 168 1.50 1812 121323213 CHAP	
Cs Manager WANCED CETTONS ystem Logs agnose dministrator assword ustomice UI ension Update FEDODT			

Figure 36: RADIUS Authentication

4.3.5 RSA SecurID Dynamic Token Authentication

JTHORIZATIONS >> Author	ntications	# Help # Lo
System Setting Database Setting Ouster Setting Policy Setting Route Setting Ousta Setting	Configure RSA SecurID sdconf.rec file HostSecret file I	Browse
Servers Register Certificate Setting AUTHORIZATIONS	OK	
Users Manager Authentications PCs Manager AdvinueD Options		
System Logs Diagnose Administrator Password Customice UI Version Update		
REBOOT		



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4.3.6 USB Key Authentication

Download and install the USB Key driver from the world images of home page of RAP

- Register a user required USB Key authentication
 - Select a kind of USB key in the keys list and click "OK" to set USB Key extra authentication flag
 - When adds a user, plug the key built in CA in the USB port
 - Click "Upload Certificate" button to upload the certificate to the DB from key
 - When there is no any certificate in this key, click "Update" button can generate a certificate both in this USB Key and in DB
- User required USB Key authentication Login to application
 - Plugs the USB Key in the USB port of the remote PC, before logins to RAP
 - Display second authentication page after you login the normal authentication first page of RAP successfully
 - Input the Key pass to start authenticating

IORIZATIONS >> Users Man	NORT			# Help # Log
ISTEM MANAGER	Hodify User Profile			
Restarcase second Duster Setting	User ID	vps		
toute Setting	Full Name	vps		
Setting Servers Register	Email	support@helmsys	com	
Certificate Setting	Mobile	13641381130	Enable Mobile Authentication	
UTHORIZATIONS	Expiration	[(1111-00)	
iroups Manager	Account	F Enable T Disat	sle	
uthentications	User Group	Hember Of		
Cs Manager	Num. of hosts	1		
DVANCED OPTIONS	Certificate	Uploaded Upda	te	
System Logs	Hardware Binding	C Enable C Disa	ble	
kagnose dministrator rassword Justonice UI Ienian Update REBOOT SRUTDOWN	Delete Reset Pas	sword Upload Cer	tificate OK	Cancel

Figure 38: USB Key Authentication Registration

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4.3.7 Mobile Authentication

ACID COLLARIZED S >> Addentication Bit Hole Copy • STICE MANAGER • Synthes String Outcase String • Backs String • Backs String • Backs String • Backs String • Backs String • Backs String • Carl Backs • String	Remote Access Pass	Remote Access Pass
Capage 8 200-2007 Hells Systems Care, M Rytin Reserved.	All Collaboration (a) - but metality Bit (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	ACCONTINUED >> Adventuation C BUILTIANDER BUILTIANDER

Figure 39: Mobile Module and Gateway Modes Setting

There are three mobile modes can be used:

- Module Mode: Connect a mobile hardware module device to RS232 port of RAP appliance or the RS232 port of any Windows PC in the same LAN with RAP. Plug the SIM card to this hardware module device.
- ^a Gateway Mode: The mobile telecom gateway is installed in the corporate LAN.
- There are same parameters can be input above two modes:

The IP address and port of module device or gateway The available time (millisecond)

 Message Channel Mode: The message service center is provided by mobile provider in the Internet. The service needs authentication

Click OK: Resets the parameters of mobile server Click Reset: Display the current data of mobile server

HORIZATIONS >> Authentication	ans -		# Help	Logou
System Setting Database Setting Quster Setting	Configure Hobile Server			1
Policy Setting Route Setting	Hobile Hodes :	C Hodule C Gateway	⁽⁶ Hessage Channel	
Servers Register	Hobile Server IP	192 168 0 223		
Ceronicate Second	Hobile Server Port	5000		
AUTHORIZATIONS	Available Time	1200000	ms	
Groups Manager Users Manager	smsld	trustes		
Authentications PCs Mapager	Sms_Password			
ADVANCED CONTIONS System Logs Disgroue Administrator Password Customice UI Version Update REBOOT SHUTDOWN		CK: Reset		

Figure 40: Mobile Message Channel Mode Setting

The different country may need different mobile code depend on different mobile service provider. The code should be written in the mobile.properties file.

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4.3.8 Hardware bound

After select "Enable Hardware Binding", requires the user must authenticate both userID/Password and the PC pointed by system when the user login.

HORIZATIONS >> Users Ma	nager			# Help # U
STEM MANAGER				
System Setting	Modify User Profile			
Database Setting Cluster Setting				
Policy Setting	User ID	vps		_
Route Setting	Full Name	P ps		
Servers Register	Email	support@helmsy	rs.com	
Certificate Setting	Mobile	13641381130	Enable Hobile Authenticat	ion
AUTHORIZATIONS	Expiration		(1111-00)	
Groups Manager	Account	F trable T De	sable	
Users Manager	User Group	Hember Of		
PCs Manager	Num. of hosts	1		
ADVANCED OPTIONS	Hardware Binding	@ Enable C D	isable	
European Lang	Requested Hard	ware ID	Bound Hardware II	D
Diagnose	4B4EFEC5B4FC62	8D049F	C785E991072BD79C3	190
Administrator	100000000000000000000000000000000000000	B	ind>	
Customize UI		F	Remove	
Version Update				
DEBOART.			p	_
Del ITTORNA				

Figure 41: Hardware Bound Setting

- Select the Hardware Binding in User Profile.
- [•] The user login RAP through the PC that want to be bound , Download the plug-in package of USBKEY when user access the first login page since "Enable Hardware Binding" is selected.
- The admin views the hardware ID and confirmed the ID as a bound ID with user. Select the hardware ID from "Required Hardware ID" and click "Bind →" to see the hardware ID moved from "Required Hardware ID" to "Bound Hardware ID". The "Bind" finished when clicks "OK".
- □ The admin select the hardware ID from "Bound Hardware ID" and click "←Remove" to see the hardware ID moved from "Bound Hardware ID" to "Required Hardware ID". The "Unbind" finished when clicks "OK".
- [•] The all hardware Ids in the "Required Hardware ID" are cleared if the hardware ID in "Required Hardware ID" had not been bound by admin until three days.

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Figure 42: Single SignOn Server Configuration

4.3.9 Single SignOn Server

- Check the radio check box to enable or disable Single SignOn service on the authentication type list page. This function is corresponding to local DB authentication. It can control the target applications accessed through RAP centralize authentication and authorization.
- When the SSO service is enabled, you must configure the SSO server name first (Do not set IP address instead of server name).
 This function is powered by JASIG CAS SSO. Please access the web site" <u>http://www.jasig.org</u>" to get the detail for client application configuration.

4.3.10 Custom Authentications

- Through the API of the custom authentication system combined with RAP, define the attribute <CUSTOM NAME="", SERVER="", PORT="", SHARED_SECRET=""/> in sysconfig.xml file.
- The SUNYARD and EKEY of customed authentications (Token Ring) had been supported.
- [•] The IP, Port and Shared Secret can be modified through following page.

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Figure 43: Custom Authentication Setting

4.3.11 Synchronization of User for Certificate stored in LDAP with Two-way SSL Authentication

Add the tag <SYNC_LDAP_USER>true</SYNC_LDAP_USER>; at the same time set tag<AUTO_ADD_USER>true</AUTO_ADD_USER> in the sysconfig.xml file to enable the synchronization of user date from LDAP to VPN after authentication.

Add the tag<GROUP_FIELD>"group name"</GROUP_FIELD> to define group name from LDAP group field name

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4.4 PCs Manager

The core technology of Remote control PC is based on open source code VNC. After modified and optimized the VNC code, the management function of PC registered is added.

- ✤ The PC registration is done by user.
- From the Targets tab, target computer usage profiles can be viewed and deleted. ID numbers are assigned at the time of target computer registration.
- The Description column target computer names.
- Deletion of an owners target computer will remove the registered computer from the system and does not simply delete the log files. To delete the computer from the system, check the box to the left of the undesired profile and select the <u>Delete</u> link at the bottom of the checkbox column.
- The Target Computer Profile may be viewed by selecting the link in the Description column.
- *** Owner ID** is the User ID login.
- **Owner Name** is the First and Last name fields. Users may change their registered names from the User Profile link on the Main Page screen.
- Description is the target computer name. Users may change the registered name of their computer using the Operations Profile link on the Main Page screen
- **Cast modified on** is the date the target profile was last changed.
- User Access Logs may be viewed by selecting the link in the Owner column on the Targets tab. This provides specific usage data, such as login and computer access dates and times. User Access Logs may not be modified.

REFW. R	emote Ac	cess Pass		HELM SYS	BMENT
AUTHORIZATIONS >> PCs Man	ager			II Help	Logout
* SYSTEM MANAGER	Computer P	lanage			
Database Setting Ouster Setting	Г	Computer ID	Computer Name	UserName	
Policy Setting Route Setting Outla Setting	<u>г</u>	1234567951 1234567845	EVER/AST_COMP1 DEH01	cy wang vps	
Servers Register Certificate Setting AUTHORIZATIONS			Delete		
Groups Manager Users Manager Authentications FC: Manager					
ANIANCED CATLONS					
Chagnose Administrator Password Custonize UI Version Update					
X REBOOT X SHUTDOWN					
			Creyright B :	002-2007 Helm Systems Corp. All	lights Reserved.



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1.			MENSAS MEED
THORIZATIONS >> PCs Man	agar		II Help 📕 Logout
SYSTEM MANAGER	Target Computer Profile		
Database Setting	ID	1234567951	
Policy Setting	Owner ID	cyw	
Route Setting	Owner Name	cy wang	
Servers Register	Description	EVERFAST_COMP1	
Certificate Setting	Created On	2006-09-23 04:57:21	
AUTHORIZATIONS	Last Hodified On	2006-11-11 03:12:49	
Authentications PCs Manager ADVANCED COTIONS System Logs Diagnose Advinistrator Password Customize UI Version Update		Return	

Figure 45: View Target PC Profile

ZATIONS >> PCs Man	ager			II Help
M MANAGER	- liter Arrest Los			
an Setting base Setting	USER ID: COM	11570	NAME: COMMON	
Setting	Time	From	Target Computer	Description
Setting	2007-01-30 12:19:59	75.6.224.202		Logout
Setting	2007-01-30 12:19:48	75.6.224.202		Login
s Register	2006-12-07 21:16:28	75.6.250.184		Logout
	2006-12-07 21:13:22	75.6.250.184		Login
RIZATIONS	2006-12-07 20:32:27	75.6.250.184		Logout
Manager	2006-12-07 20:31:15	75.6.250.184	2	Login
Aanager Vications	2006-11-27 12:10:00	75.6.250.184	5	Logout
mager	2006-11-27 12:09:20	75.6.250.184		Login
CED OFTIME	2006-11-17 22:50:58	75.6.250.184		Logout
CLU OF HOLE	2006-11-17 22:49:28	75.6.250.184		Login
n Logs use istrator ord mize UI		Return	PAGE(1 of 13): 1	2345>+

Figure 46: View User Access Log

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5. Advanced Options

5.1 System Logs (View or Download)

Select the "System Logs" link

NCED OPTIONS >> System	m Logs				# Help	Logou
STEM MANAGER						
wstem Setting	Log File	8				
latabase Setting	Г	View File	Created Time	File Size	Download File	
alicy Setting	Г	access log.2007-02-01.txt	2007-02-01 11:15	14830	zip file	
oute Setting	Ē	user access los 2007-02-01.brt	2007-02-01 00:29	111	rin file	
ervers Register	F	access log 2007-01-31.txt	2007-01-31 23:44	4160	the file	
Certificate Setting	Ē	user access los 2007-01-31.5xt	2007-01-31 13:54	111	tio file.	
UTHORIZATIONS	Ē	access ion 2007-01-30.txt	2007-01-30 23:15	65680	cip file	
and the same	Ē	user access los 2007-01-30.txt	2007-01-30 12:19	297	zia file	
Users Manager	Ē	access log.2007-01-29.5xt	2007-01-29 22:32	48438	cia file	
uthentications	Ē	user access los 2007-01-29.5xt	2007-01-29 17:32	222	rip file	
Carroanaya	Ē	access log.2007-01-28.txt	2007-01-28 23:46	86597	cia file	
OVANCED OPTIONS	Ē	catalea.out	2007-01-28 21:24	55869	tin file	
ystem Logs	Ē	catalasa 2007-01-28.log	2007-01-28 21:24	13149	cia file	
lagnose dministrator	Ē	user access los 2007-01-28.txt	2007-01-28 01:00	333	rin file	
assword						
ersion Update						
			Desese			

Figure 47: System Log Files

5.2 Diagnose

Select the "Diagnose" link

Network Diagnos			
ping	192.168.1.15	_	Go
teloet	192.168.1.25	108]:	Go
traceroute	192.168.1.39		Go
tcpdump	<u>г</u> и		60
		Cancel	
	ping telnet traceroute tcpdump	ping [192.168.1.15 televet [192.168.1.25 tracevorte [192.168.1.39 trapdwmp //	ping [192 168 1.15 televet [192 168 1.2580] tracenoute [192 168 1.39 topdomp //

Access is gained to the log files. All error and users access messages generated by the RAP server are recorded within three files:

user_access_log.DATE.txt, localhost_access_log.DATE.txt, or catalina.out. You may view the log files within the browser by simply selecting the link to view the file or you may download it for local viewing.

The format of both traceroute and tcpdump are defined in

http://www.freesoft.org/CIE/Topi cs/54.htm

http://www.freesoft.org/CIE/Topi cs/55.htm

Figure 48: Status of Internal Server Connection Diagnose

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5.3 Dynamic Domain Name System (DDNS)

Select the "Dynamic DNS" link

WCED OPTIONS >> Dynamic DNS			# Help 📕 Log
STEM MANAGER System Setting tradibases Setting haiter Setting takes Setting and Setting unda Setting with servers Register entificate Setting UN-SETATIONS	c Domain Nam Dynamic Dom namic Interni nd the Routes www.dyndm. Enable	ne System aan Name System (DONS) featur et IP address. It is useful when y r. Before you can use this featur arcy, a DONS service provider.	e lets you assign a fixed domain name to you are bosting your RAP SSL VPR server e, you mark register a free domain name ble [©] Disable
course Manager		Configuration fo	r DORS
sers Manager	User Name	helmsys	
Cs Manager	Password		
INANCED OPTIONS	Host Name	rap.gotons.com	
ystem Logs Jagriose ymanic (MS dministrator assword ustromike UI ension Update	_	Apply	•

Figure 49: Dynamic DNS

5.4 Administrator

Select the "Administrator" link.

	instrator		# Help	Logout
System Setting Database Setting Ouster Setting Policy Setting Route Setting Quita Setting Servers Register	Administrator Profile Admin Login ID Email	Admin support@helmsys.com	-	
Certificate Setting AUTHORIZATIONS Groups Manager Justers Manager Authentications PCs Manager		OK Clear		
ADVANCED OPTIONS System Logs Diagnose Administrator Pastword Customise UI Version Update				
REPORT				

Figure 50: System Administrative Configuration

The feature lets you assign a fixed domain name to a dynamic Internet IP address. It is useful when you are hosting your RAP server behind the Router. Before you can use this feature, you must register a free domain name with www.dyndns.org, which is a DDNS service provider. Enable the DDNS feature • Enter the user name (registered account name of dyndns) • Enter the password (registered account password of dyndns) • Enter the host name (assigned alias of dynamic DNS host in dyndns account)

The Web Management Port may be set to a specific port for reduced visibility to casual visitors.

The Trusted IP and the Trusted Mask are set to restrict requests to a specific domain or a specific workstation. For example, setting the trusted IP to 10.8.105.20 and the network mask to the setting 255.255.255.0, permits only the workstations with IP addresses in 10.8.105.0 subnet to access this administration console.

The e-mail address set on this page is the default e-mail for system administrator event notification. This e-mail address is also provided to the end-users for technical support and for reporting system problems.

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5.5 Password

Select the "<u>Password</u>" link

ELM».	Remote Access Pass	(TELM SYSTEMS
ACUNCED OFDOTE >> has System Setting Databas Setting Databas Setting Databas Setting Databas Setting Databas Setting Databas Setting Databas Setting Cartificate Setting	Change Password Old Password Ileve Password Confirm Password	EHeb E Lopot
		Copyright © 2002-2007 Helm Systems Corp. All Rights Reserved.

Figure 51: Change Admin Password

5.6 Customize UI

Select the "<u>Customize UI</u>" link



Figure 52: Customize the User Interface

Display the text field allow admin to change his (her) password for admin console login

- Some user wants to customize the logo and background of application login page they hoped.
- The can design their own image following the request: The image size: 590 (w) x 540 (h) pixels and image format: gif.

The new image file replaces the original image of login page. The background color of the login page can be changes either using the color picker.

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5.7 Version Update and Data Backup

When the system latest version is available, the provider or agent will provide it to the customer.

The administrator can update the RAP server through this tool page.

- Click "<u>Save Current Version</u>" button, the system can download the current version package from Helm service center to your local PC.
- Select this update package using file browser and click "<u>Update</u>" button, the RAP can update automatically.
- If there is any question after update the latest version, click the" <u>Recover Pre-version</u>" button can recover the system back to previous version.
- Click "<u>Backup Database</u>" button, the system can backup the data of all the tables in database to a specific file.
- Select the file that backup the data of database using file browser and click
 <u>"Restore Database</u>" button can restore the data from the file to database.

DVANCED OPTIONS >> Ver	sion Update	# Help 📲 Logor
System Setting Database Setting Ouster Setting Policy Setting Route Setting	Update Version Current Version 2.1.0.2389 Update Package (From provider or agent)	Browse
Cost Setting Servers Register Certificate Setting AUTH-OSIZATIONS Groups Manager Users Manager	Update Save Current Versio Backup Your Database	<u>α</u>
PCs Manager Advanced options System Logs Diagnose Administrator	Backup File Browse	abase
Pastword Customize UI Version Update REBOOT		

Figure 53: Update Version and Data Backup

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6. Help

- Click "<u>Help</u>" and select "Remote Access Pass Administrator Manual", the browser will display the content of the file in right frame.
- If can't display this file, then there is no "Acrobat Reader" be installed in your PC. You can read this file after you click "Acrobat Reader" link to install it.



Figure 54: Online Document

7. Logout

Click "Logout" to exit the RAP admin console

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8. Reboot

Click "<u>Reboot</u>" to restart the RAP systems

9. Shutdown

Click "<u>Shutdown</u>" to halt the RAP systems. After the LCD's are off except power after click "Shutdown" a couple of minutes, turn the RAP switch off.

Note: When click "Shutdown" button, the system can not be accessed remotely any more. It needs manually to restart.

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Appendix (A) RAP Connections in Networks:

The firewall needs open 443# port to allow user accessing the application page of RAP. For making the remote accessing more efficiently, all non web based applications are relay through 80# port. The firewall needs open 80# port too as well as makes http protocol detector off for 80# port.

A1. One router, one firewall with one C class



Figure A1

A2. One router with one C class



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A3. One router, one proxy and one C class



Since there is no firewall to map the public IP to private IP, all workstations behind router should use this C class IPs. Then configure Router to allow outside access RAP's 443 and 80 port.

Ex:

Access-list 101 permit tcp any host 50.50.50.10 443 Access-list 101 permit tcp any host 50.50.50.10:80

Figure A3

A4. One DSL router, one firewall and Cable modem or DSL connection

The customers should make sure they have at least 3 IP addresses. So router, firewall and RAP can have one respectively. The physical connection is same as figure 1. Or, there is no firewall in its environment, the customer only need to own two addresses of IP; one is for router and the other one for RAP. See figure 4.



It needs to enable NAT and add the policy of routing in "Route Manager" of admin

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A5. The customer only has a PC connecting to DSL or Cable modem





Notes:

- The RAP can support the case that there is a proxy in front of remote PC even this proxy needs authentication.
- \circ The firewall or router needs mapping the 443# port to the internal IP of RAP
- RAP can be deployed to the DMZ area
- The firewall isolates all the ports except 443# and 80#

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Appendix (B) Configuration of system file – sysconfig.xml:

The sysconfig.xml file is located in /usr/apps/tomcat/data/ folder in the RAP box. Following is an original template sample:

<?xml version="1.0" encoding="UTF-8"?> <SysConfig> <APPLICATION PORT>8805</APPLICATION PORT> <TUNNEL PORT>443</TUNNEL PORT> <SYSTEM INITIALIZED>Y</SYSTEM INITIALIZED> <SYS ADMIN PASSWORD></SYS ADMIN PASSWORD> <ADMIN MASK>0.0.0.0</ADMIN MASK> <AUTO ADD USER></AUTO ADD USER> <MAIL USER></MAIL USER> <ENABLE_DB_LOG>Y</ENABLE_DB_LOG> <DATABASE TYPE>HSQL</DATABASE TYPE> <SSO_SERVER>192.168.1.62</SSO_SERVER> <DNS SERVER></DNS SERVER> <ADMIN IP>127.0.0.1</ADMIN IP> <SERVER_NAME> </SERVER_NAME> <ROW PER PAGE>10</ROW PER PAGE> <ALLOW_TUNNEL>1</ALLOW_TUNNEL> <LICENSE_CODE></LICENSE_CODE> <SSO PORT>8443</SSO PORT> <RELAY PORT>80</RELAY PORT> <SERIAL ID></SERIAL ID> <LICENSE MODE>CONCURRENT USER MODE</LICENSE MODE> <FIX IP></FIX IP> <ENABLE_SSO>1</ENABLE_SSO> <AUTODISCOVER_SERVER></AUTODISCOVER_SERVER> <CRL></CRL> <DEBUG_SCHEME></DEBUG_SCHEME> <MAIL PWD></MAIL PWD> <MAIL SERVER></MAIL_SERVER> <SYS ADMIN NAME>Admin</SYS ADMIN NAME> <CLIENT AUTH>false</CLIENT AUTH> <TUNNEL_PROTOCOL>https</TUNNEL_PROTOCOL> <VPS PORT>8088</VPS PORT> <LOOK FEEL>0</LOOK FEEL> <EXTERNAL CRYPTO ALG>Y</EXTERNAL CRYPTO ALG> <CUSTOMER_CRYPTO_KEY>12345678</CUSTOMER_CRYPTO_KEY> <SYSLOG_SERVER></SYSLOG_SERVER> <RDP_PORT>8803</RDP_PORT> <SYS_ADM_EMAIL>support@helmsys.com</SYS_ADM_EMAIL> <SYSLOG PORT></SYSLOG PORT> <PROXY_PORT>8804</PROXY_PORT> <DEFAULT_NETWORK_INTERFACE>eth0</DEFAULT_NETWORK_INTERFACE> <DEFAULT GATEWAY></DEFAULT GATEWAY> <ADMIN PORT>8802</ADMIN PORT> <SYNC LDAP USER>false</SYNC_LDAP_USER> <SUPPORTED SERVER> <WWW NAME="Web Server"/> <EXCHANGE NAME="Exchange Server"/> <CLIENT_SERVER NAME="Restricted Client/Server"/> <GENERIC CS NAME="Generic Client/Server"/> <VPN NAME="Network Tunneling"/> <TELNET NAME="Telnet Service"/> <SSH NAME="SSH Service"/> <FTP NAME="FTP Service"/> <TERMINAL SERVER NAME="Terminal Service"/> <POP3 NAME="POP3 Server"/>

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<imap name="IMAP Server"></imap>
<cebc description="CapInfo USB Key" type="USB_KEY"></cebc>
<haikey_1000 description="HaiTai USB Key" type="USB_KEY"></haikey_1000>
<network_interfaces></network_interfaces>
<pre><eth0 <="" default_gateway="192.168.1.1" enable_nat="false" ip="192.168.1.62" pre=""></eth0></pre>
SUBNET_MASK="255.255.255.0"/>
<remote_raps></remote_raps>
<authentication></authentication>
<db enabled="true"></db>
<ldap <="" admin_name="" base_dn="" cert_field="" enabled="false" group_field="" td=""></ldap>
ID_FIELD="" MAIL_FIELD="" PASSWORD="" PORT="389" SERVER=""/>
<radius <="" authentication_method="" enabled="false" port="0" server="" td=""></radius>
SHARED_SECRET=""/>
<custom enabled="false" name=""></custom>

You can modify any parameter in this file following its exactly name.

For example:

1. Login the administrator system of RAP: <u>https://x.y.m.n:8802</u> (For security reason)

2. Uses the URL: https://x.y.m.n:8802/servlet/AdmServlet?handler=SysConfig&action=config&SysConfig.DE BUG_SCHEME=5&SysConfig.ROW_PER_PAGE=20 to replace the current URL

The x.y.m.n is the IP address of this RAP.

After runs above URL, the parameter DEBUG_SCHEME of sysconfig.xml is modified to 5. (Debugging record level change to 5) and the parameter ROW_PER_PAGE of sysconfig.xml is modify to 20. (Display 20 user lists per page in the RAP admin system.