NN10277-111

Succession Multimedia Communications Portfolio MCP SIP Web Client Manager Basics

Standard MCP 1.1 FP1 (02.02) April 2003





Overview

Functional description

The SIP Web Client Manager (WCM) is an optional functional component of the Multimedia Communications Portfolio (MCP). It provides the interface for communication between the SIP Multimedia Web Client and the SIP Application Module and SIP Provisioning Module. These communications include: sending and receiving multimedia calls; obtaining subscribers service packages, updating address books, and presence statuses of buddies.

SIP Web Client Manager	The SIP Web Client Manager manages web-based client applications and enables subscribers to access SIP services from a browser.
	The SIP Web Client Manager also provides the SIP Multimedia Web Client feature set and enables the interworking of the SIP Multimedia Web Client and the SIP Application Module.
	The SIP Web Client Manager is deployed from the System Management Console. Once the SIP Web Clinet Manager is deployed, the administrator can access it through a web browser as soon as the end user's account is set up.



Figure 1 Network Component Interoperability

The clouds in the diagram represent two distinct networks. The Private MCP Network cloud interacts with the Managed Public Network cloud through the different edge components. The SIP Web Client Manager is dual-homed. It communicates with the SIP Application Module and the Provisioning Module through the Private MCP Network, and SIP Multimedia Web Client through the Managed Public Network.

Hardware

Server hardware hosting the Web Client Manager

A Sun Netra t 1400 (DC power)/1405 (AC power) hosts the SIP Web Client Manager. The number of servers depends on the MCP deployment scenario.

Hardware	Details
Sun Server	Sun Netra t 1400/1405 with the following hardware features:
	• 4 440 Mhz CPUs
	• 4 GB RAM
	• 2 36.4 GB Disks
	32x internal CD-ROM Drive
	 1 20 GB 4mm DDS-4 Internal Tape Drive
	1 Quad Fast Ethernet (QFE) PCI card
	10x Internal DVD-ROM drive
	Sliding Rack Mount Kit

MCP OAM&P strategy

The OAM&P strategy for MCP is to manage system operations from a central location. The central location for OAM&P management is in the Management Module which resides on the Management Server. From the System Management Console, you can view, add, modify, delete, lock, and unlock the various components in the system.

Interfaces

The SIP Web Client Manager is used to control or manage the signaling of the SIP Multimedia Web Clients. The signaling between the clients and the manager is done by way of Web Client Session Control Protocol (WCSCP)/TCP.

The SIP Web Client Manager has the following two interfaces:

- SIP/UDP. The SIP Web Client Manager uses this interface to send SIP signaling to the SIP Application Module (port 5060) for requests on behalf of SIP Multimedia Web Clients.
- WCSCP/TCP. The SIP Web Client Manager uses this interface to control or manage sessions of the SIP Multimedia Web Clients..

User interfaces

The System Management Console manages the SIP Web Client Manager.



Upgrades

Nortel Networks recommends that system administrators only perform software upgrades with involvement from Nortel Networks.

Software updates are deployed using the System Management Console. The update can be either an up-versioning of the software or a roll back to an earlier version. Only versions not currently deployed appear in the loadlist.

The update process automatically fills the service property fields of the updated component with the configured values from the previous version. During the update, a comparison of the configuration fields is performed, and new services identified. An update that introduces new functionality across many components will not affect network stability.

Updating the software affects the operation of the component's hosted services during the procedure.

For more information on updating component software, refer to System Management Console Basics.



Fault management

Network fault management strategy

The MCP 1.1 FP1 system handles network fault management through alarms and logs. SIP Multimedia Web Client alarms and logs are viewed from the System Management Console. (See the MCP System Management Console Basics NTP for tasks related to alarms and logs.)

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8 Fault management



Configuration

Network strategy

The MCP network strategy is to configure all of the components in a central location. The central location for configuration is the Management Server Console.

The following sections provide information on configuring the SIP Web Client Manager.

Configuration procedures

Log in to the management server console. For detailed procedures on logging into the management server console, please refer to the *System Management Console Basics* document.

Configuration details

When you deploy the WCM, you will also need to deploy the web bundle (otherwise the web client will not work). In the Web Client Mananger tab of the WCM bundle, ensure that WCM Socket Server Active is checked. Ensure all values in the Web Client Manager tab are the same as the Web bundle's (except for the Socket Server Active tab).

SIP Web Client Manager

Adding the SIP Web Client Manager component server

from the management console

- 1 Select the server that the Web Client Manager will be added to from the system hierarchy.
- 2 Right-click the highlighted word "component" to get the option to add a component.
- **3** Select "Add "and then "Component."
- 4 Select "WCM" from the load list.
- 5 You will be prompted to configure the component.

- 6 Configure the component attributes. (For configuration property details, place your cursor over the property and a definition help box will pop up.)
- 7 Click Apply.

Figure 2 Web Client Manager tab

Conference Service Web Client Manager	Forward Service User Agent Factory Database Base User Agent Server SIP TCF Base LOC_IW_Factory
* WCM Socket Server Active :	N
* WCM Socket Server Host :	47.104.23.58
* WCM Socket Server Port :	3090
* Audio RTP Port Low :	50000
* Audio RTP Port High :	50100
* Use SSL :	
* Keep Alive Ping :	
* Ping Time Out Timer :	60
* Ping Interval Timer :	120
* Connection Time Out Timer :	360

Table 1 Web Client Manager Properties

Configuration Property	Format	Description
WCM Socket Server Active	Type: Boolean Range: checked or unchecked Default: checked	Start the WCM socket server
WCM Socket Server Host	Type: String Range: xxx.xxx.xxx.xxx MinLength = 7 MaxLength = 15 Default: 0.0.0.0	Socket Server IP Address

Configuration Property	Format	Description
WCM Socket Port	Type: PositiveInteger Range: N/A, Min = 0 Max = 65535 Default: 3090	WCM socket port number
Audio RTP Port Low	Type: PositiveInteger Range: N/A, Min = 0 Max = 65535 Default: 50000	Starting Port Address for RTP Port stream
Audio RTP Port High	Type: PositiveInteger Range: N/A, Min = 0 Max = 65535 Default: 50100	Ending Port Address for RTP Port stream
Use SSL	Type: Boolean Range: checked or unchecked Default: checked	Use SSL in the socket connection
Keep Alive Ping	Type: Boolean Range: checked or unchecked Default: checked	Keep the the connection alive with ping messages
Ping Time Out Timer	Type:PositiveInteger Range: N/A, Min = 1 Max = 3600 Default: 60	Ping time out timer value in seconds
Ping Interval Timer	Type: PositiveInteger Range: N/A, Min = 30 Max = 1200 Default: 120	Ping interval value in seconds
Connection Time Out Timer	Type: PositiveInteger Range: N/A, Min = 90 Max = 3600 Default: 360	Connection time out value in seconds

Table 1 Web Client Manager Properties

🐼 Modify System.Sites.MgmtSite.Servers.IPCMWeb.Services 💶 🔼 🗙			
User Agent Factory Web Client Manager User Agent Serv	Forward Service LOC IW Factory er	Conference_Service Database Base SIP TCF Base	
* Application Server Host : * Application Server Port : * Show GUI :	47.104.12.139 5060		
		Reset	
	Apply Cancel		

Figure 3 User Agent Server tab

Table 2 User Agent Server Properties

Configuration Property	Format	Description
Application Server Host	Type: String Range: xxx.xxx.xxx.xxx MinLength = 7 MaxLength = 15 Default: proxy host IP address	Application Server IP address

Table 2	User A	Agent	Server	Properties	;
	00017	gon	001001	roportioe	,

Configuration Property	Format	Description
Application Server Port	Type: PositiveInteger Range: MinLength = 0 MaxLength = 65535 Default: 5060	Application Server Port number
Show GUI	Type: Boolean Range: checked or unchecked Default: unchecked (read-only)	show WCM GUI

Figure 4 SIP TCF Base tab

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Database Base User Agent Factory User Agent Server SIP TCF Base	Forward Service Conference_Service Web Client Manager LOC_IW_Factory
* Transport Config :	UDP=47.104.12.148:5080:optional;TCP
* Retransmission off :	
* Invite Timer :	128000
* Application Type :	user_agent
* Time Transaction :	
* Add Defaults :	
* Check Mandatory Headers :	
* Maximum Number of Redirections :	5
* Initial Maximum Hop Value :	20
<u> </u>	
	Reset
Apply	Cancel

Configuration Property	Format	Description
Transport Config	Type: String Range: xxx.xxx.xxx.xxx MinLength = N/A, 7 MaxLength = 15 Default: proxy host	Specifies the transport, IP addresses, and ports
Retransmission off	Type: Boolean Range: checked or unchecked Default: checked	SIP retransmission for unreliable transports is disabled
Invite Timer	Type: PositiveInteger Range: Min: 120000 Max: 3600000 Default: 1280	Controls the maximum time to wait for an INVITE to receive a final response, after receiving a provisional response
		Time is in milliseconds
Application Type	Type: PositiveInteger Range: Min: 10	Type of SIP Server on node
	Max: 16	Values= callstate_server,
	Default: (read only; user agent)	stateful_server, stateless_server, user_agent
Time Transaction	Type: Boolean Range: checked or unchecked	Specifies if the SIP transactions are timed
	Default: (read only) checked	

Table 3 SIP TCF Base Properties

Configuration Property	Format	Description
Add Defaults	Type: Boolean Range: checked or unchecked Default: checked	Specifies whether to fill in missing mandatory headers with default values in the SDP message bodies.
		Recommended Value: checked
Check Mandatory Headers	Type: Boolean Range: checked or unchecked Default: unchecked	Controls whether the mandatory SDP headers are checked for presence in the SDP messages.
		Recommended Value: unchecked
Maximum Number of Redirections	Type: PositiveInteger Range: Min: 3 Max: 10	Maximum number of redirections allowed before a request is dropped
	Default: 5	
Initial Maximum Hop value	Type: PositiveInteger Range: Min: 5 Max: 50	Maximum number of hops allowed before a request is dropped
	Default: 20	

Table 3 SIP TCF Base Properties

Database Base User Agent Server	Jser Agent Factory SIP TCF Base	Forward Service Web Client Manag	Conference	Service _Factory
* Initial Capacity :	32768			
				Reset
	Apply	Cancel		

Figure 5 LOC IW Factory tab

Table 4 LOC IW Factory Properties

Configuration Property	Format	Description
Initial capacity	Type: PositiveInteger	Initial capacity
	MinLength = N/A MaxLength = 32768	
	Default: 32768	

User Agent Server	SIP TCF Base	Web Client Manager
LOC_IW_Factory	e i Co Database Base	User Agent Factory
* Primary Host :	47.104.24.30	
* Connections :	5	
Secondary Host :	47.104.24.33	
		Boost
		Reset
	Apply Canc	el

Figure 6 Database Base tab

 Table 5
 Database Base Properties

Configuration Property	Format	Description
Primary Host	Type: PositiveInteger Range: xxx.xxx.xxx MinLength = N/A, 7 MaxLength = 15 Default: host IP address	IP Address of primary database Valid IPV4 Address

Configuration Property	Format	Description
Connections	Type: PositiveInteger Range: Min: 1 Max: 16	Number of database connections
	Default: 5	
Secondary Host	Type: PositiveInteger Range: Min: 0	IP Address of replicated database
	Max: 15 Optional: checked	Valid IPV4 Address(optional)

Table 5 Database Base Properties

Figure 7 User Agent Factory tab

User Agent Server SIP I CF Bas	se VVeb Client Manager
Forward Service	Conference Service
LOC_IW_Factory Database Ba	ise User Agent Factory
* User Agent Port	: 5080
* User Agent Mode	: 🔽
* Initial Capacity	: 8192
* User Agent Task Queue Capacity	: 8192
* UATaskPoolIncr	: 128
<u>.</u>	 Reset
Apply C	ancel

Configuration Property	Format	Description
User Agent Port	Type: PositiveInteger Range: MinLength = N/A MaxLength = 5080	Port number to use on the User Agent
User Agent Mode	Type: Boolean Range: checked = client unchecked = server	Specifies for the User Agent to act as a client or server
	Default: checked	
Initial Capacity	Type: PositiveInteger Range: Min: N/A Max: 8192	Inital number of simultaneous sessions
User Agent Task Queue Capacity	Type: PositiveInteger Range: Min: N/A Max: 8192	Initial capacity of the User Agent task queue
UATaskPoolIncr	Type: PositiveInteger Range: Min: N/A Max: 128	User agent task queue capacity increment number

Table 6 User Agent Factory Properties

moully system sites right site servers are mounted	
LOC_IW_Factory Database Base User Agent User Agent Server SIP TCF Base Web Client M Forward Service Conference_Service	Factory lanager ce
* Enable Forward on No Answer : 🔽	
* Enable Originating CM : 🛛 🔽	
	Reset
Apply Cancel	

Figure 8 Forward Service tab

 Table 7
 Forward Service Properties

Configuration Property	Format	Description
Enable Forward on No Answer	Type: Boolean Range: checked or unchecked Default: checked	Whether or not to forward when there is no answer
Enable Originating CM	Type: Boolean Range: checked or unchecked Default: checked	Whether or not to enable Originating CM

LOC_IW_Factory User Agent Server Forward Serv	Databa SIP TC	se Base F Base Cont	User Agent Factory Web Client Manage Iference_Service	/ r
Conf Server URL :	sip:confe	erence		
			Reset	
	Apply	Cance	el	

Figure 9 Conference Service tab

Table 8 Conference Service Properties

Configuration Property	Format	Description
Conf Server URL	Type: PositiveInteger Range: MinLength = 0 MaxLength = 128	Conference Server URL
	Optional: checked	
	Default:sip:conferen ce	



Accounting management

Strategy

The MCP SIP Web Client Manager (WCM) does not do any accounting management. For more information on accounting, please refer to the *MCP Accounting Module Basics* NTP.



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Performance management

Performance management

SIP Web Client Manager performance is monitored through the System Management Console GUI by way of Operational Measurements. Refer to the *System Management Console Basics* NTP for information on OMs and viewing OMs.



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Security and Administration

Security strategy overview

For the security strategy please refer to the *MCP Network Engineering Guide*. For basic administration please refer to the *System Management Console Basics* NTP.

Succession Multimedia Communications Portfolio MCP SIP Web Client Manger Basics

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