Succession 1000
Succession 1000M
Succession 3.0 Software

Succession 1000 Element Manager

Installation and Configuration

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Revision history

October 2003

Standard 1.00. This document is a new NTP for Succession 3.0. It was created to support a restructuring of the Documentation Library. This document contains information previously contained in the following legacy document, now retired: Element Management (553-3023-222). Content from Element Management (553-3023-222) also appears in *Succession 1000 Element Manager: System Administration* (553-3001-332).

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About this document

This document is a global document. Contact your system supplier or your Nortel Networks representative to verify that the hardware and software described are supported in your area.

Subject

This Nortel Networks Technical Publication (NTP) is a reference tool for Element Manager, a web-based interface that enables configuration, maintenance, upgrade, and patching functions from a PC. This document describes the interface and its related functionality.

Note on legacy products and releases

This NTP contains information about systems, components, and features that are compatible with Succession 3.0 Software. For more information on legacy products and releases, click the **Technical Documentation** link under **Support** on the Nortel Networks home page:

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Applicable systems

This document applies to the following systems:

- Succession 1000
- Succession 1000M Cabinet
- Succession 1000M Chassis
- Succession 1000M Half Group

- Succession 1000M Single Group
- Succession 1000M Multi Group

Note that memory upgrades may be required to run Succession 3.0 Software on CP3 or CP4 systems (Options 51C, 61, 61C, 81, 81C).

System migration

When particular Meridian 1 systems are upgraded to run Succession 3.0 Software and configured to include a Succession Signaling Server, they become Succession 1000M systems. Table 1 lists each Meridian 1 system that supports an upgrade path to a Succession 1000M system.

Table 1
Meridian 1 systems to Succession 1000M systems

This Meridian 1 system...	Maps to this Succession 1000M system
Meridian 1 Option 11C Chassis	Succession 1000M Chassis
Meridian 1 Option 11C Cabinet	Succession 1000M Cabinet
Meridian 1 Option 51C	Succession 1000M Half Group
Meridian 1 Option 61	Succession 1000M Single Group
Meridian 1 Option 61C	Succession 1000M Single Group
Meridian 1 Option 61C CP PII	Succession 1000M Single Group
Meridian 1 Option 81	Succession 1000M Multi Group
Meridian 1 Option 81C	Succession 1000M Multi Group
Meridian 1 Option 81C CP PII	Succession 1000M Multi Group

Note the following:

- When an Option 11C system is upgraded to run Succession 3.0 Software, that system becomes a Meridian 1 Option 11C Cabinet.
- When an Option 11C Mini system is upgraded to run Succession 3.0 Software, that system becomes a Meridian 1 Option 11C Chassis.

For more information, see one or more of the following NTPs:

- *Small System: Upgrade Procedures* (553-3011-258)
- *Large System: Upgrade Procedures* (553-3021-258)
- *Succession 1000 System: Upgrade Procedures* (553-3031-258)

Intended audience

This document is intended for individuals responsible for system installation or configuration using web-based Element Manager.

Conventions

Terminology

In this document, the following systems are referred to generically as "system":

- Succession 1000
- Succession 1000M

The following systems are referred to generically as "Small System":

- Succession 1000M Chassis
- Succession 1000M Cabinet

The following systems are referred to generically as "Large System":

- Meridian 1 Option 51C
- Meridian 1 Option 61
- Meridian 1 Option 61C
- Meridian 1 Option 61C CP PII
- Meridian 1 Option 81
- Meridian 1 Option 81C
- Meridian 1 Option 81C CP PII
- Succession 1000M Half Group

- Succession 1000M Single Group
- Succession 1000M Multi Group

The call processor in Succession 1000 and Succession 1000M systems is referred to as the "Succession Call Server".

Related information

This section lists information sources that relate to this document.

NTPs

The following NTPs are referenced in this document:

- *Signaling Server: Installation and Configuration* (553-3001-212)
- *Branch Office* (553-3001-214)
- *Succession 1000 Element Manager: System Administration* (553-3001-332)
- *IP Line: Description, Installation, and Operation* (553-3001-365)
- *Succession 1000 System: Installation and Configuration* (553-3031-210)

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CD-ROM

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Installation and configuration of Succession Element Manager

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Client web browser

In order to access Element Manager functionality provided by Succession 3.0 software, your PC must be running the Microsoft™ Internet Explorer 6.02 web browser. Netscape Navigator is not supported at this time. At a

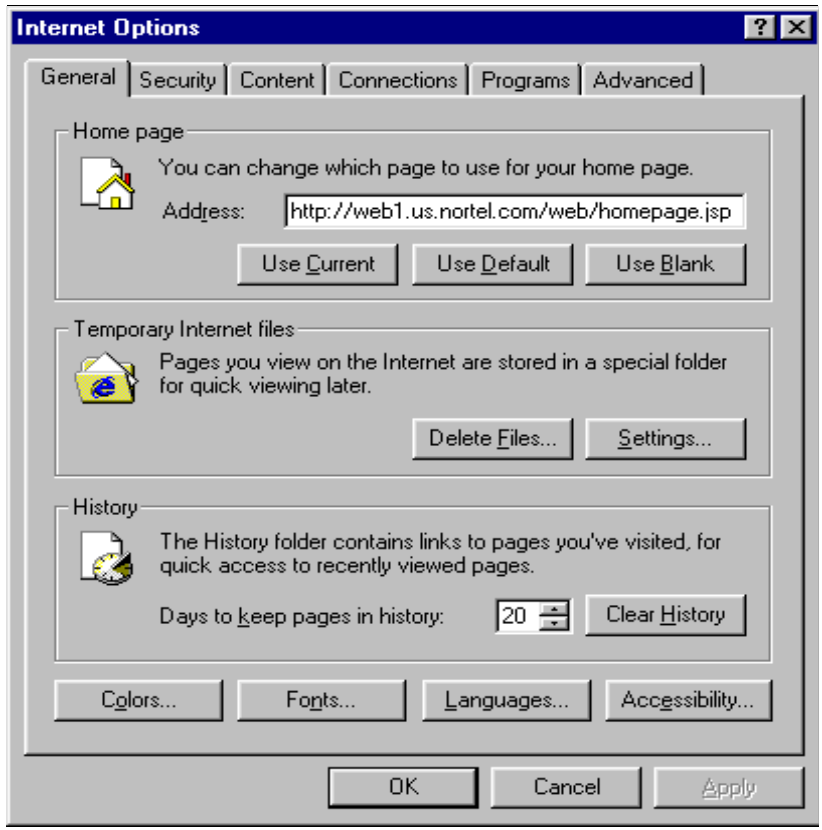
minimum, the management PC must have a Pentium III processor operating at 500 MHz.

It is important that you properly configure cache properties in the web browser. To ensure that users receive the latest information, do the following:

1 In Internet Explorer, select **Tools > Internet Options**.

Result: The Internet Options dialog box opens.

Figure 1
Internet Options dialog box



2 Under Temporary Internet files, click **Settings**.

Result: The Settings dialog box opens, as shown in Figure 2.

Figure 2
Settings dialog box

3 Click the **Every visit to the page** radio button.

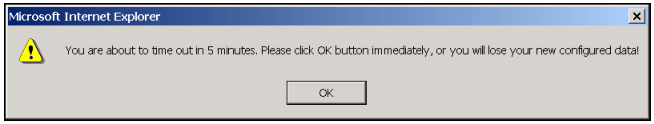
4 Click **OK**.

Time-out due to inactivity

The application times out after a period of inactivity. In all Element Manager web pages, with the exception of the **Node Summary > Edit** page, users are logged out without any warning.

When you are in the **Node Summary > Edit** page, prior to the time-out, a message displays that warns of the impending action (Figure 3 on page 14). Click **OK** within the remaining time-out period (5 minutes) to reset the timer. If you do not respond within the 5 minute warning period, your session is cancelled and you must log in again. Any data modifications made on screen but not submitted to the system are lost.

Figure 3
Time-out warning message box



Succession Signaling Server installation

Installation of the Succession Signaling Server is performed using a CD-ROM and a PC or terminal connected to a serial port. See *Signaling Server: Installation and Configuration* (553-3001-212).

> ***Note:*** The Signaling Server CD-ROM should be self-booting. If you experience trouble with creating or using a bootable software CD-ROM, use the files in the "mkboot" directory to create a boot floppy (refer to the README.TXT file on the CD-ROM for instructions). Both the boot floppy and software CD-ROM are required to perform a software installation or upgrade. At the Boot menu, press "C" to boot from the CD-ROM.

After software installation and basic configuration of the Succession Signaling Server, components can be configured using the web-based interface. The web server is installed on each Succession Signaling Server within a system. All HTML web pages and data files required for web-based Element Manager of the Succession Call Server, Succession Signaling Server, and IP Line 3.1 / Voice Gateway Media Cards are installed on the Succession Signaling Server as part of the standard installation or upgrade process.

You can use the Install Tool to install the Succession Signaling Server components, which consists of an Install Floppy and a Software CD. The install floppy contains boot code and other additional installation runs from the Software CD.

The Install Tool displays the Succession Signaling Server's MAC address. If the Signaling Server is designated as the primary Signalling Server for a node, you must enter network parameters, including IP addresses, subnet masks, and gateways. Optionally, you can enter default basic configuration

parameters. With this minimal configuration information, valid *bootp.tab* and *config.ini* files will be installed on the Succession Signaling Server with the following default values:

- Terminal Proxy Service (TPS) — On
- H.323 Gateway Signaling — On
- Gatekeeper — Off

The workfile delivered by the Install Tool contains all Succession Signaling Server operating system, application, and web files. The Succession Signaling Server installation includes default configuration files for the Signaling Servers and, if configured through the install menu, the IP Line 3.1 / Voice Gateway cards. The Install Tool also copies firmware for IP telephones and loadware for IP Line 3.1 / Voice Gateway cards to the Signaling Server's hard disk. Using Element Manager, the firmware and loadware can be downloaded to the same components.

Element bootup

This section describes the bootup process for the components supported with the Element Manager interface.

Call Server and Shelf Controller

If you are using a Succession CSE 1000 Release 2 system, there are no changes. Bootup of the Call Server and Shelf Controller is not dependent on any other component.

Succession Signaling Server

If the Succession Signaling Server is designated as the primary Signaling Server for its node, it provides BOOTP service to all other configured Signaling Servers and Voice Gateway Media Cards within its node. The primary Signaling Server determines its own network information using a combination of locally stored static information and the *bootp.tab* file.

If the Succession Signaling Server is designated as a follower (non-primary) Signaling Server, it generates a BOOTP request to retrieve its network information. The request for IP address, node ID, and node IP is directed to a

BOOTP server within its node. If the BOOTP request fails, the Signaling Server will utilize the last configuration. This fallback configuration data is stored locally on the Signalling Server. If the BOOTP request is successful, the Signaling Server will refresh its current fallback configuration data.

All Succession Signaling Servers read the contents of the *config.ini* files located on their hard disks for additional configuration parameters and to determine which of the following applications to load:

- TPS
- H.323 Signaling Proxy
- Gatekeeper

IP Line 3.1 / Voice Gateway card

If the IP Line 3.1 / Voice Gateway card is a follower of a Succession Signaling Server leader, it generates a BOOTP request to retrieve its network information. The request for IP address, node ID, and node IP is directed to a BOOTP server within its node. If the BOOTP request fails, the IP Line 3.1 / Voice Gateway card will utilize the last configuration. This fallback configuration data is stored locally on the IP Line 3.1 / Voice Gateway card. If the BOOTP request is successful, the IP Line 3.1 / Voice Gateway card will refresh its current fallback configuration data.

If the IP Line 3.1 / Voice Gateway card is located in a standalone ITGL node and is designated as the leader for its node, it provides BOOTP service to all other configured IP Line 3.1 / Voice Gateway cards within its node. The leader determines its own network information using a combination of locally stored static information and the *bootp.tab* file.

If the IP Line 3.1 / Voice Gateway card is located in a standalone ITGL node and is designated as a follower, it generates a BOOTP request to retrieve its network information. The request for IP address, node ID, and node IP is directed to a BOOTP server within its node. If the BOOTP request fails, the IP Line 3.1 / Voice Gateway card will utilize the last configuration. This fallback configuration data is stored locally on the IP Line 3.1 / Voice Gateway card. If the BOOTP request is successful, the IP Line 3.1 / Voice Gateway card will refresh its current fallback configuration data.

The IP Line 3.1 / Voice Gateway card reads the contents of the *config.ini* file located on its disk for additional configuration parameters.

Branch Office H.323 WAN Gateway

The bootup process for the Branch Office H.323 WAN Gateway is the same as that of the Call Server and is not dependent on any other component.

Element Manager configuration

This section describes the processes and procedures that you will use to configure the components of Element Manager.

Note: IP addresses shown in Figures 5, 6, 7, and 8 are examples.

Procedure 1
Configuring Element Manager

Multiple web servers are utilized to configure and maintain a Succession 1000 or Succession 1000M system using Element Manager. The following procedure explains how to configure a system using the web server running on the Succession Signaling Server platform.

1 Install the Call Server and primary Signaling Server. Refer to *Succession 1000 System: Installation and Configuration* (553-3031-210) and "Succession Signaling Server installation" on page 14. Enter parameters at prompts during the installation, as shown in Figure 4.

Figure 4
Succession Signaling Server configuration using the Install Tool

```
Succession Enterprise Software Signaling Server Install Tool (sse-x.xx.xx)
========================================================================


In this step, you define the role of this Signaling Server.

If you set this Signaling Server as a Leader, then data networking
and IP telephony parameters must be entered now. (This will pre-
configure the IP telephony node files.)

If you set this Signaling Server as a Follower, then data networking
and IP telephony parameters must be configured through Element
Manager.

NOTE: This will over-write all existing data network and IP
      telephony configuration on this Signaling Server.

        Please enter:
<CR> -> <a> - Set this Signaling Server as a Leader.
        <b> - Set this Signaling Server as a Follower.
        <q> - Quit.

        Enter Choice>
```

If the PC to be used as the web browser is (a) connected via the ELAN, and (b) on the same subnet as the Signaling Server, then only configure the ELAN parameters during Signaling Server installation.

If the PC that will be used as the web client is connected via the TLAN, in addition to the ELAN parameters, you must also enter either the Signaling Server ELAN or TLAN IP addresses during installation.

2 From the PC web browser, enter the ELAN or TLAN address of the primary Signaling Server as the URL, as shown in Figure 5 on page 19.

Note: Do not assign the same IP address for the Node ID and the TLAN. This must be verified manually. The Node IP address must be on the same subnet as the TLAN IP addresses of the SMC cards. Also, the SMC card's TLAN and ELAN network interfaces must reside on separate logical subnets.

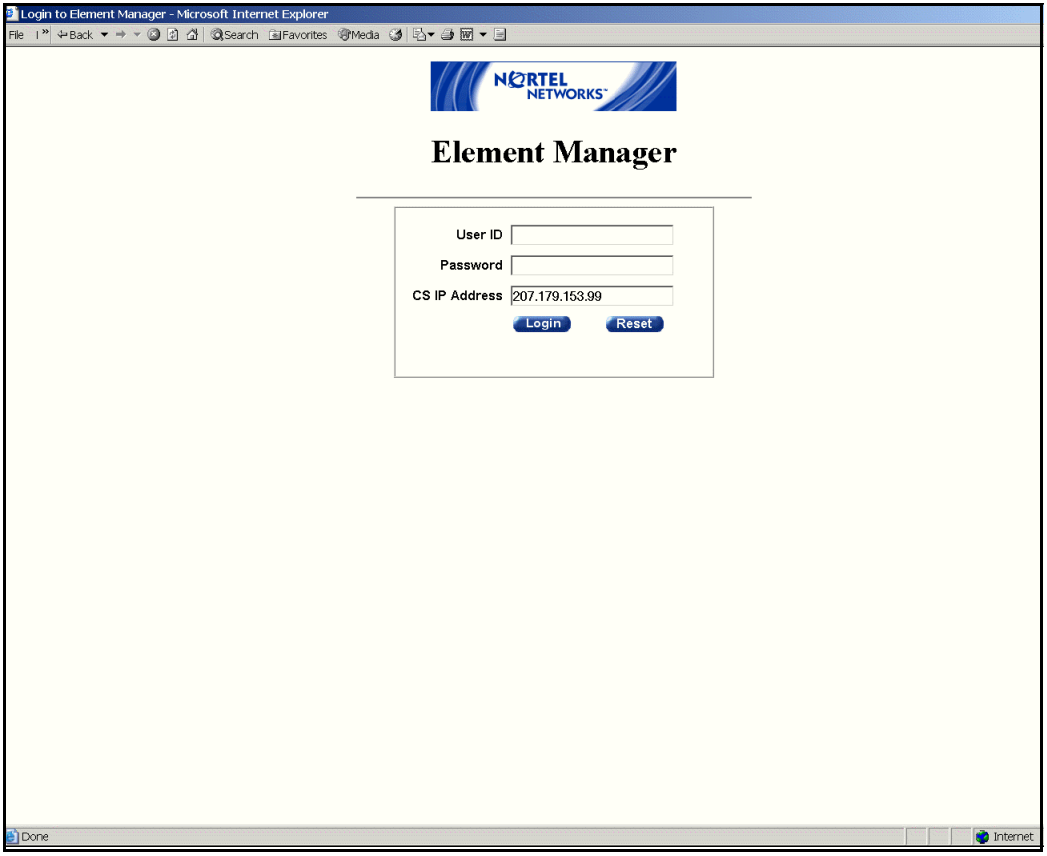
Figure 5
Entering an IP address

If additional configuration parameters were entered during installation, the node IP address can also be used as the URL.

Result: The login dialog window opens, as shown in Figure 6 on page 20.

Initially, you may be prompted to enter the Succession Call Server's IP address. This is because the Call Server is used for web login authorization. This is a requirement since, unless you entered additional configuration parameters during the Signaling Server installation, the node configuration data file containing the Call Server's IP address does not yet exist.

Figure 6
Element Manager login page



3 To log in, enter a Level 1 or Level 2 username and password. If configured, you may also use an LAPW username and password.

If this is the first time that the Call Server has been accessed, the login usernames and passwords will not have been changed, and the default Level 1 or Level 2 username and password will be used.

Result: Once your login has been authorized, you are presented with the initial Element Manager web page shown in Figure 9 on page 24. From this page you can begin to configure the Call Server or IP telephony node. See *IP Line: Description, Installation, and Operation* (553-3001-365) and *Succession 1000 Element Manager: System Administration* (553-3001-332).

End of Procedure

Procedure 2
Accessing a Succession Branch Office for configuration and maintenance

Use the following procedure to access a Succession Branch Office Gateway.

1 Install the Succession Branch Office Gateway as described in *Branch Office* (553-3001-214), including installation of the IP Line 3.1 / Voice Gateway Media Cards.

2 From the PC web browser, enter the ELAN or TLAN IP address of the Branch Office Signaling Server, as shown in Figure 5 on page 19.

Result: The Login web page is presented. See Figure 6 on page 20.

3 To log in, enter a Level 1, Level 2, or LAPW (if configured) username and password.

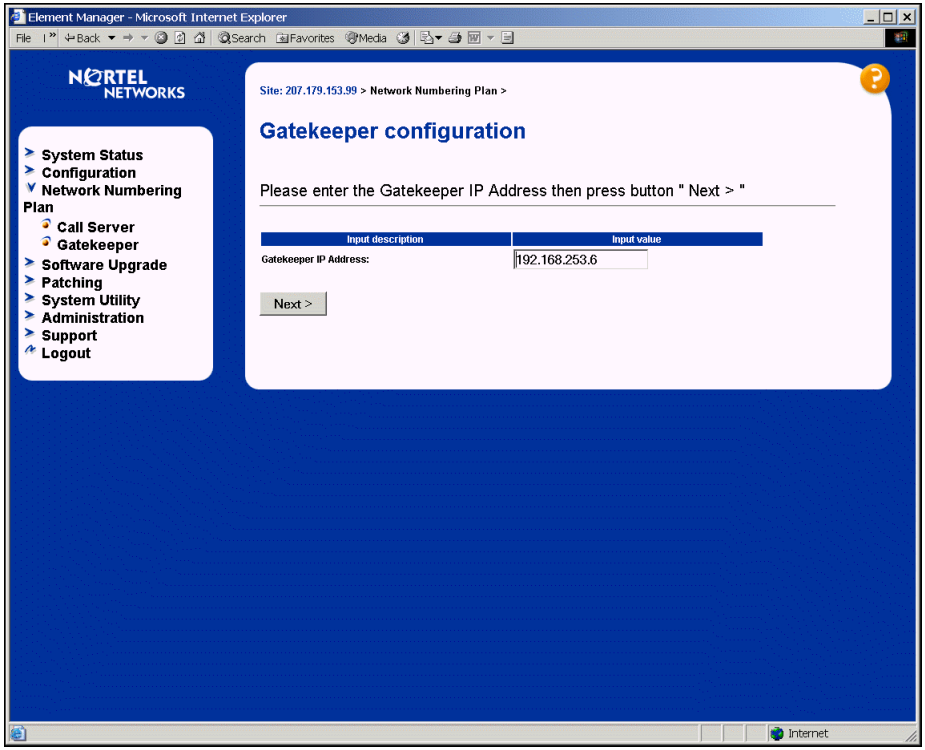
Note: If this is the first time the Gateway has been accessed, no default login names and passwords will have changed, and the default Level 1 or Level 2 login name and password will be used.

Once login has been validated, you are presented with the initial web page as shown in Figure 9 on page 24.

4 Begin configuration or maintenance activities on this Succession Branch Office Gateway by clicking on **Network Numbering Plan > Gatekeeper**.

Result: The Gatekeeper configuration web page is presented. See Figure 7 on page 22.

Figure 7
Gatekeeper configuration page

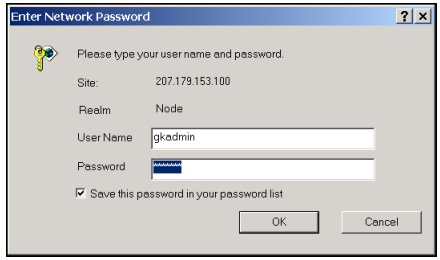


5 Enter the Gatekeeper IP address and click **Next**.

Result: The Network Password dialog box is presented, prompting for a login name and password. See Figure 8 on page 23.

Note: The login name and password may be different than those used to access the Call Server since the Succession Branch Office Gateway is configured as a separate PBX.

Figure 8
Password dialogue box



End of Procedure

Procedure 3
Accessing the Call Server, Succession Signaling Server, and IP Line 3.1 / Voice Gateway card for configuration and maintenance

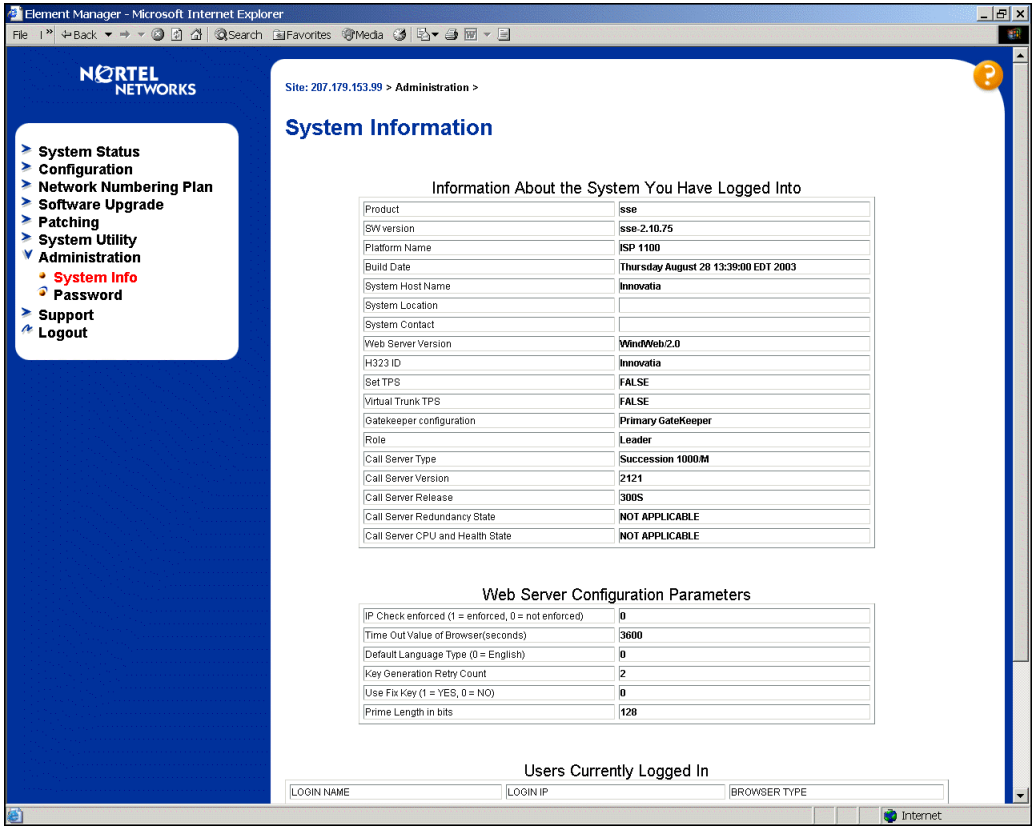
1 For configuration or maintenance of the Call Server, Succession Signaling Server, or IP Line 3.1 / Voice Gateway cards, use the Node IP address as the URL to access the component in your web browser. For example, if the Node IP address is 47.11.228.208, enter http:// 47.11.228.208 for the URL.

Result: You will be prompted for a login name and password before being presented with the initial web page as shown in Figure 9 on page 24.

2 Configure or maintain components as required. From this page you can begin to configure the Call Server or IP telephony node. See *IP Line: Description, Installation, and Operation* (553-3001-365) and *Succession 1000 Element Manager: System Administration* (553-3001-332).

End of Procedure

Figure 9
System Information web page



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Succession 1000, Succession 1000M

Succession 1000 Element Manager

Installation and Configuration

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