

Getting Started with TMS

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1. Purpose of the Document

The purpose of this document is to provide an easy to implement guide to setting up and using TMS (Telepresence Management System) to manage video conferencing endpoints and infrastructure.

The document is not intended to cover all aspects of TMS, but aims to provide a good starting point for basic administration of systems.

2. What is TMS

2.1. Features

TMS is a management system for video conferencing systems. Features included are:

- Web interface provides visibility and centralized management of the video conferencing network; including statistics, directories, booking and software updates for on-site and remote video systems
- End-to-end management for video conferencing endpoints and infrastructure; manages endpoints, MCUs, video recording solutions, gatekeepers, gateways and phone books
- Multi-vendor support; TMS supports management of network and video equipment from multiple vendors
- Straightforward software upgrades with automatic release key retrieval for units under maintenance
- Real time management and details of all conferences; ad-hoc and scheduled.
- Graphical monitor supplies an overview of the entire network
- Consolidated list of open tickets with links to recommended fixes; event notification alerts to prevent and minimizes negative service level
- Tracks all system usage and identifies trends, including packet loss, bandwidth usage, and system auditing
- Supports administrative audits

2.2. TMS Database

The TMS server is a hardware device located in the ATOS data centre. Access to the system is via a web interface.

Data is held in a SQL database, housed on a separate server. As the SQL server supports a number of clinical applications, it provides a high availability service that is fully backed up and maintained.

2.3. TMS Licensing

Each system registered on TMS requires a TMS licence. Although a number of licences may have been issued to you as part of your trial of TMS, additional licences will need to be purchased and maintained to cover your video conferencing estate. Licences can be purchased in blocks of 25 at a cost of approximately £120 / licences. Annual maintenance charges are in the region of £20 – £35 per licence depending on the quantity purchased.

Should you wish to purchase TMS licences, please contact Hazel Archer on hazel.archer@nhs.net to ensure compatibility with the maintenance provision currently in place.

If you already use TMS, it may be possible to migrate your existing licences onto the central server. Please contact hazel.archer@nhs.net for further information.

3. Access to TMS

3.1. User Accounts

Access to TMS is controlled by the Technical Advisory Group. Access is currently restricted to named individuals working in a video conferencing support or administrative role. Key points of contact for each board should be identified and contact details shared with the Technical Advisory Group. Only these named contacts will be allowed to authorise access changes for that health board.

As TMS is a shared system the following access rules have been agreed.

- Access is via individual user accounts only. Account details must not be shared.
- Approval for account setup or changed to permissions must be submitted via e-mail from the named contact within the health board.
- By default, account holders will have read / write access to their own health board area and read only access to other health board area.
- All changes to access rights should be submitted to hazel.archer@nhs.net or john.potts@nhs.net for approval and actioning.
- Any health board exceeding their licence allocation will be required to remove systems from TMS or purchase additional licences. Failure to maintain an adequate licence count will result in TMS access being suspended.

Although the ongoing charging model for TMS had not yet been agreed this is likely to be based on a usage model.

3.2. System Requirements

Supported web browsers

Internet Explorer 7.0 or later

Firefox 3.6 or later

Java Runtime Engine 1.5.0 or later

4. Logging into TMS

To access TMS, using a supported web browser, navigate to:

`tms.scot.nhs.uk/tms`

When prompted enter your username and password

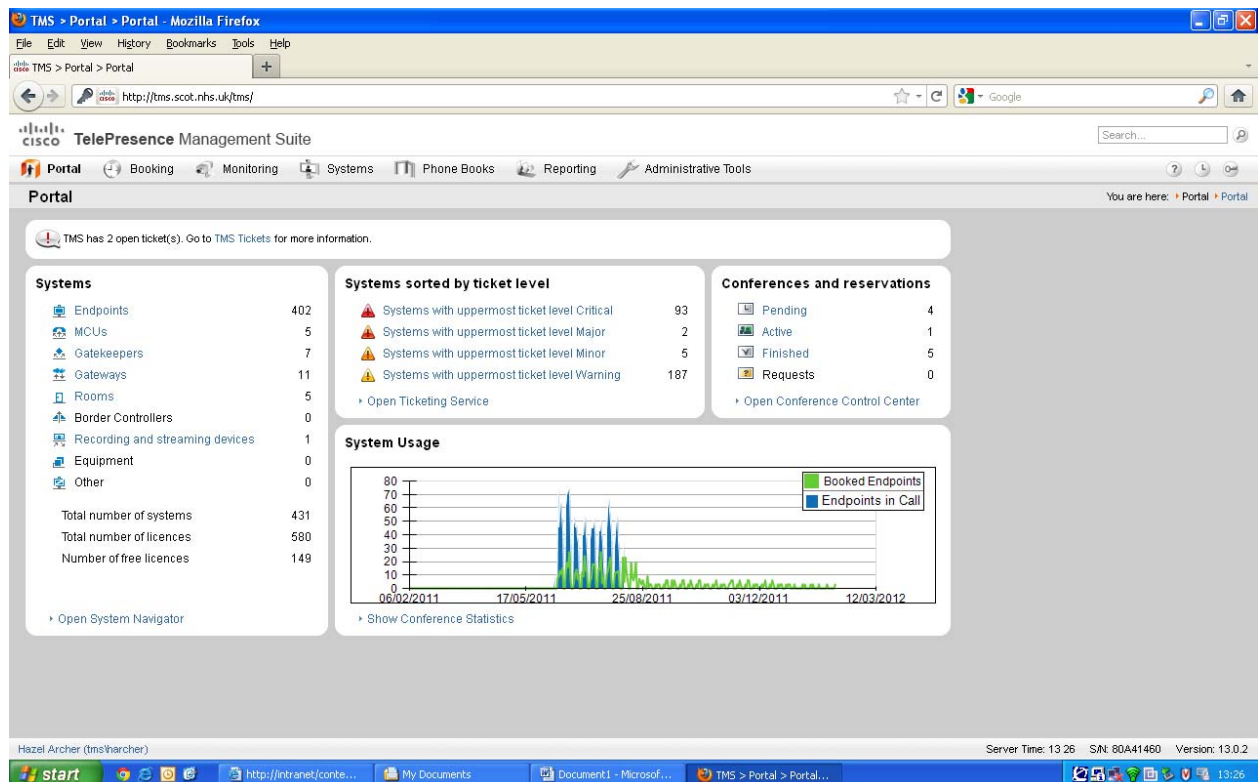
Username: `tms\jbloggs`

Password: <password as supplied>

Please note that it is not currently possible for user to change their own passwords. This is due to the security settings on the SQL server not allowing remote desktop logins. If you require a password reset, please contact hazel.archer@nhs.net or john.potts@nhs.net.

5. TMS Portal

On logging in, the TMS portal is displayed. This provided an overview of systems registered, system usage, system support 'tickets' and conference bookings. The main navigation menus are located across the top banner of the screen.

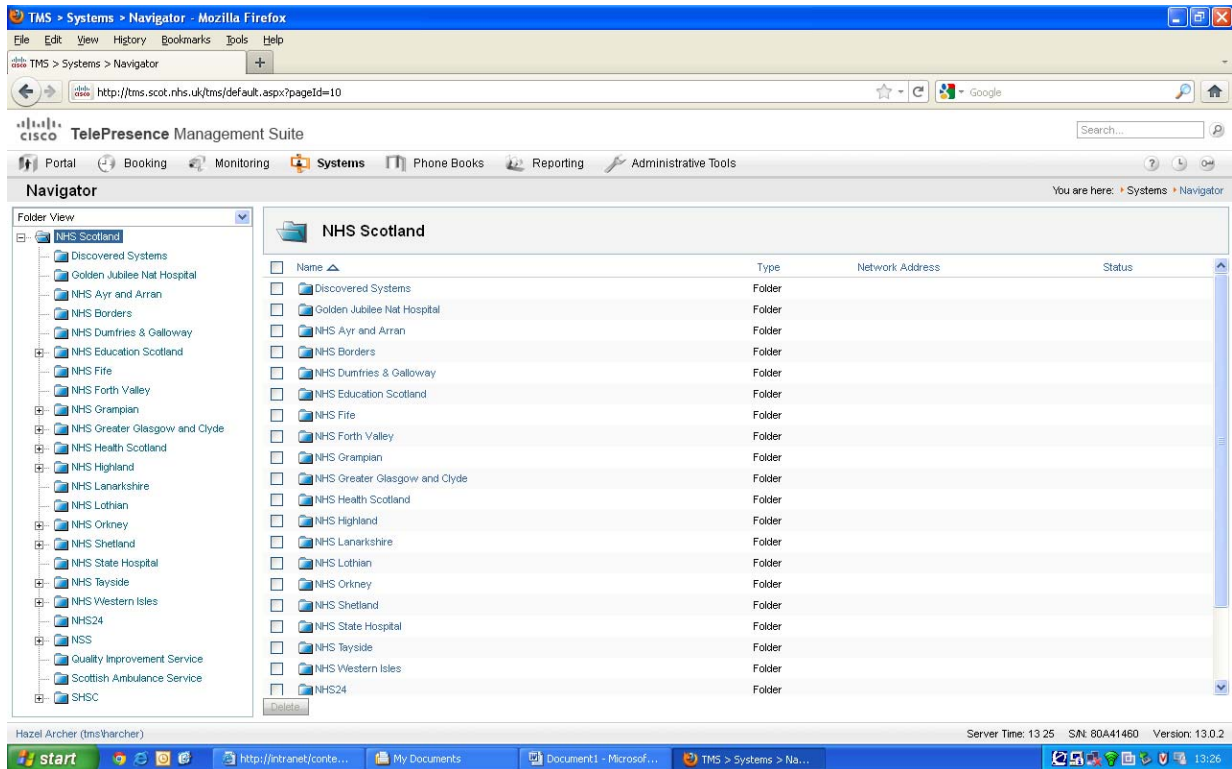


6. Setting up Folders

By default, a single health board folder and automatically generated system phonebooks will have been set up for your board. To view this folder:

Hover over the <System> menu then select <Navigator>

This displays a folder view sorted by Health Board.



From the list on the left, select your health board.

Depending on the number of systems and locations you need to manage, design the storage structure accordingly. If you have a small number of systems a single folder may be adequate. On larger systems, a folder per town or per site may be more appropriate. Systems can be easily moved between folders, so it is possible to change this structure at a later date.

To create a new folder:

Click the <New Folder> Box in the right hand pane

Enter the folder name and description into the dialogue box and click <Save>

7. Locations

In the pages under the Administrative Tools > Locations menu, you define physical locations for your video systems. Each piece of equipment must be attached to a location for TMS to manage scheduling and routing of calls for the systems.

ISDN and IP zones are defined so that TMS will know which calls are possible, which prefixes and area codes are needed, and what protocols to use. Systems in the same IP zone will always connect on IP by default when they are booked via TMS. If you always want to use ISDN between systems in a location, they should therefore not be part of an IP zone. Also, systems that will never connect on ISDN (except through a gateway) should not be part of an ISDN zone.

7.1. Adding zones for initial configuration

A simple network plan is described below.

- For each system you will manage that has ISDN directly connected to it (include MCUs, Gateways and endpoints), create one ISDN zone. Before creating a new zone, consider whether an existing zone has the same values. For instance, if you have a MCU, Gateway, and endpoint all in the same area that all use the same ISDN dialling behaviours, they can all use the same ISDN Zone.
- You do not need to create all ISDN zones now, but you should create ones for the initial systems you plan on working with. Normally adding more ISDN zones is done before or after adding a new system to TMS.
- For each ISDN Gateway you have (gateways that act as a pooled service can be considered a single gateway), create one IP zone.
- If you have no Gateways, you still must have at least one IP zone.

7.2. Examples

If you have an ISDN gateway using lines with an area code 01234, create an ISDN zone for the 01234 area. Also create an IP zone for the gateway. Add the gateway to TMS and allocate it into both the 01234 ISDN zone and IP zone. Register systems that use the gateway onto TMS and allocate them into the IP zone. (Please note that systems that only access ISDN through a gateway should NOT be registered into an ISDN zone.)

If you have an endpoint with ISDN directly connected in the 01234 area code, make the system a member of the 01234 ISDN zone.

If you have systems that have ISDN directly connected¹ to them in different area codes, create ISDN zones for each area code and assign systems accordingly.

If you have systems that you do not wish to connect through a gateway, create a separate IP zone that is not associated with a corresponding ISDN zone or gateway.

7.3. ISDN Zone Setup

To set up an ISDN zone

Select Administrative Tools > Locations > ISDN Zones

Click the <New> box at the bottom of the screen

Enter the ISDN zone name. It is recommended that zones are named using the appropriate health board prefix eg NHSGGC or NHST. This is to distinguish easily between health boards on the shared system.

Set the Country / Region to UK

Enter the area code without the leading '0'

¹ When configuring systems with a direct ISDN connection only the local ISDN number should be configured into the ISDN settings of the codec. This is to prevent TMS adding an area code onto a number and trying to dial a number such as 01234 012324 567890.

If you have dial codes to access low cost routing, these can be entered into the <Line> section, otherwise leave blank.

Specify the number of digits used for local ISDN calls (ie 6 or 7)

Click <Save>

ISDN Zones

General

ISDN Zone Name: NHS GGC Yorkhill

Country/Region: UK

Area Code: 141

Line

To access an outside line for local calls, dial:

To access an outside line for long distance calls, dial:

Internal Calls

Number of digits to use for internal ISDN calls: 7

Save Area Code Rules Cancel

7.4. IP Zone Setup

To set up an IP zone

Select Administrative Tools > Locations > IP Zones

Click the <New> box at the bottom of the screen

Enter the IP zone name. It is recommended that zones are names using the appropriate health board prefix ie NHSGGC or NHST. This is to distinguish easily between health boards on the shared system.

If the IP zone will contain a gateway, select the ISDN zone associated with the gateway

The URI domain name may be left blank

Enter the Gateway Auto Prefix, this is the number prefix used to make an outgoing video call through the gateway.

If you have one, enter the Gateway Telephone Prefix. This is the number prefix used to make outgoing telephone calls through the gateway.

If you have one, enter the Gateway 3G Prefix. This is the number prefix used to make outgoing 3G calls through the gateway.

Unless you use TCS4 numbering, leave the two <Dial-in ISDN Number> fields blank

Leave the IP-ISDN-IP box unchecked.

From the <Prefer ISDN over IP calls to these IP Zones> box, select the zones on N3 and move them to the right hand box. (Please note that as new zones are added to TMS it may be necessary to review this configuration item to ensure all new zones are reachable.)

IP Zones

IP Zone
 Name:

Gateway Resource Pool
 ISDN Zone:

URI Domain Name (e.g. tandberg.com):
 Gateway Auto Prefix:
 Gateway Telephone Prefix:
 Gateway 3G Prefix:
 Dial-in ISDN Number (e.g. +1 (555) 1231234):
 Dial-in ISDN Number for 3G (e.g. +1 (555) 1231234):
 Allow IP-ISDN-IP: ☐

Prefer ISDN over IP calls to these IP Zones

Prefer IP calls over ISDN to these IP Zones

8. Registering Systems onto TMS

To register a device onto TMS.

Navigate to the correct folder using Systems > Navigator

Select the appropriate health board folder

Click on the <Add System> box

Enter the address of the system you want to add

Select the appropriate ISDN Zone. If the system does not have directly connected ISDN, leave this field as <None>

Select the appropriate IP Zone

If the system does not use the default username and password, click on the <Advanced Settings> tab and enter the appropriate authentication settings.

When complete press <Next> to continue. TMS will then connect to the system and register it. When completed a results page will be displayed.

The system added should now be visible in the folder you selected.

Add Systems From List Pre Register Systems Add Room / Equipment

Specify Systems by IP Addresses or DNS names

Enter the IP address, DNS name or IP range of the systems to add. Each entry must be separated by a comma.
The following example will add two systems, and scan ten systems in range: user.tms.int, 10.0.0.1, 10.1.1.0 - 10.1.1.10

Enter Location Settings

ISDN Zone: None IP Zone: None

Time Zone: (GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London

Advanced Settings

Set authentication settings (if systems requires authentication to be added):

Username: Password: Admin Password:

Persistent Settings:

Persistent Template: No Template

Discovery Options

Use the following SNMP community names (new community names is only a one time setting): public, hvcpbublic, nhsvc, N55XpressW4y, Public, hvcpprivate, hwanpublic, RVGET2, RVGK

☐ Discover Non-SNMP Systems. WARNING: Will significantly increase time required for discovery

☐ Add unsupported systems (Will add ANY found system, including PC's and infrastructure devices)

Other:

Usage Type: Meeting Room

Next > Cancel

8.1. The Discovered Systems Folder

If you configure a video conferencing endpoint to be managed by TMS (rather than adding it from the TMS Systems Navigator) it will be automatically added to the Discovered Systems folder.

To move your system to the appropriate folder

- Navigate to the Discovered Systems folder

- Click the <check box> to the left of the system name

- Click the <Move/Copy> box

- From the dialog box that appears, select the destination folder

- Click the <Move> box

9. Phone Books

By default, a system generated phonebook for your health board will already have been created. Systems added to your health board folder will be automatically included in this phone book.

To add phone book to your systems

- Select the system from the Systems > Navigator

- This brings up the system summary page

NHSGGC.Glasgow.Yorkhill.Telemedicine

System Type: TANDBERG Edge 95MXP System status: Idle Network Address: 10.247.74.13 Connectivity: Reachable on LAN

Summary Settings Call Status Phone Book Connection Logs

Tickets

✓ System has no open or acknowledged tickets
[Add custom ticket](#) [Open system in Ticketing Service](#) [Edit system settings](#)

System Settings

Network address:	10.247.74.13	H.323 ID:	NHSGGC.Glasgow.Yorkhill.Telemedicine
E.164 Alias:	518571504		Room

Service Contract

Service Contract Status:	Ok	Latest Release Key(s):	1041304132086773 (F9.1) 4797497406709051 (F8.3)
Service Contract Expiry Date:	30/07/2012		

[Check for Updates](#)

Conferences

System not found in any future conferences

System Image

[Change system image](#)

Phone Books

- NHS Ayr and Arran (auto-generated)
- NHS Education Scotland (auto-generated)
- NHS Grampian (auto-generated)
- NHS Greater Glasgow and Clyde (auto-generated)
- NHS Health Scotland (auto-generated)
- NHS Highland (auto-generated)
- NHS NSS (auto-generated)
- NHS Orkney (auto-generated)
- NHS Shetland (auto-generated)

Click on the <Phone Book> tab

This displays the locally directory on the system

Click on the <Server Phone Books> box

NHSGGC.Glasgow.Yorkhill.Telemedicine

System Type: TANDBERG Edge 95MXP System status: Idle Network Address: 10.247.74.13

Summary Settings Call Status **Phone Book** Connection Logs

Remaining Server Phonebooks

» «

Server Phonebooks set on this system

- NHS Ayr and Arran (auto-generated)
- NHS Education Scotland (auto-generated)
- NHS Grampian (auto-generated)
- NHS Greater Glasgow and Clyde (auto-generated)
- NHS Health Scotland (auto-generated)
- NHS Highland (auto-generated)
- NHS NSS (auto-generated)
- NHS Orkney (auto-generated)
- NHS Shetland (auto-generated)
- NHS State Hospital (auto-generated)

Save Go to Manage Phone Books Local Phone Book

Select the phone books you want from the left hand pane and transfer them to the right hand pane. On Tandberg / Cisco systems these will be stored in easy to navigate directories, so it is reasonable to add all the phone books. On Polycom systems directory entries appear as a flat file, so it may be better to only select the required phone books.

Click on the <Save> box

If you have dial codes to access low cost routing, these can be entered into the <Line> section, otherwise leave blank.

Specify the number of digits used for local ISDN calls (ie 6 or 7)

Click <Save>

For information on creating custom phone books, please consult the TMS documentation.

10. Configuring Systems in TMS

To modify the configuration of a system in TMS

Select the system from the Systems > Navigator

This brings up the system summary page

Click on the <Settings> tab

This displays the current settings for the unit.

To modify the settings, select the <Edit Settings> tab

Modify the settings as required

Click on the <Save> box

TMS then connects to the system and updates the configuration accordingly

11. Ticketing Service

The ticketing service provides details of any alerts that have been raised by the system. To access the ticketing system

Select Systems> Ticketing Service

Tickets are listed by severity. A more useful display can be accessed by selecting <Sort by ticket type> from the drop down sort box.

Ticketing Service

You are here: Systems > Ticketing Service

Sort by ticket type

Auto Answer Off (5)

New Software Available (1)

NHSGGC.Glasgow.Yorkhill.C20

Mobile

1 open ticket

No Service Contract (2)

Service Contract Expired (3)

TMS Connection Error (8)

NHSGGC.Glasgow.Jubilee Court.Boardroom

1 open ticket

NHSGGC.Glasgow.SGH.Maternity

1 open ticket

NHSGGC.Glasgow.SGH.Neurology

1 open ticket

NHSGGC.Glasgow.Stobhill.Skye House

1 open ticket

NHSGGC.Glasgow.Yorkhill.A+E

1 open ticket

NHSGGC.SGH.Mgmt

1 open ticket

NHSGGC.Vic Inf

1 open ticket

RAH Paisley - Paediatrics

1 open ticket

Critical error

NHSGGC.Glasgow.Jubilee Court.Boardroom

System type: TANDBERG Edge 95MXP

System status: No SNMP response

Network address: 10.247.74.12

TMS Connection Error

NHSGGC.Glasgow.SGH.Maternity

System type: TANDBERG Edge 85MXP

System status: Network address missing

Network address:

TMS Connection Error

NHSGGC.Glasgow.SGH.Neurology

System type: TANDBERG Edge 95MXP

System status: No SNMP response

Network address: 10.247.74.33

TMS Connection Error

NHSGGC.Glasgow.Stobhill.Skye House

System type: TANDBERG MXP Endpoint

System status: No SNMP response

Network address: 10.247.74.30

TMS Connection Error

NHSGGC.Glasgow.Yorkhill.A+E

System type: TANDBERG Codec C20

System status: No HTTP response

Network address: 10.247.74.45

TMS Connection Error

NHSGGC.SGH.Mgmt

System type: TANDBERG Classic Endpoint

System status: No SNMP response

Network address: 10.247.74.29

TMS Connection Error

NHSGGC.Vic Inf

System type: TANDBERG Classic Endpoint

System status: No SNMP response

Network address: 10.247.74.14

TMS Connection Error

12. Further Information

For further information please consult the TMS Administrators Guide

http://www.cisco.com/en/US/docs/telepresence/infrastructure/tms/admin_guide/Cisco_TMS_Admin_Guide_13-1.pdf