

Client Software Requirements

TMS is accessed via a web interface for both administrators and users. The following are the software requirements for users to access TMS:

Minimum requirements:

- Microsoft Internet Explorer 6.0 or later
- Mozilla Firefox 2.0 or later
- Java Virtual Machine Runtime Engine (JRE) 1.5.0 or later
- A Windows Username and Password to the TMS Server (Local Machine Account or Domain account if server is joined to a domain)

Recommended requirements:

- Microsoft Internet Explorer 7.0 or later
- Mozilla Firefox 2.0 or later
- Java Virtual Machine Runtime Engine (JRE) 1.5.0 or later

A Java Virtual Machine Runtime Engine (JRE) is required for using the Monitoring pages in TMS. If not installed, most browsers will prompt to download and install the browser plug-in automatically from the Internet. If this is not possible due to security restrictions, the JRE may be installed manually on the client computer from the JRE installation file which can be downloaded from <http://www.java.com> and is included on the TMS installation media for convenience.

Installation Prerequisites

TMS requires specific Server and Network elements for an installation to be completed properly

Required prior to installation

- **Administrator Access to Windows Server and Database** – You must have administrator rights to the Windows Server to complete the installation. If an existing Database Server is to be used, you must have the login information to be used as the TMS Service Account (see [Database Permissions](#))
- **.NET 3.5 Framework** – This Microsoft component must be installed before the TMS installation can proceed. The .NET 3.5 Installer can be downloaded from Microsoft and is included on the TMS installation media for convenience.

These component are checked for and installed automatically if not present²

- **Internet Information Services (IIS) Web Server**
- **Windows SNMP Services**
- **Microsoft SQL 2005 Server Express Edition** (an existing SQL 2005 Server can also be used)

Note: Windows 2008 installations please see Appendix 1 as the IIS installation must be performed manually

Required for TMS operation

- **Domain Membership Preferred** – Each user logging into TMS needs a Windows User Login to authenticate to the website. Users must have either a local account on the TMS Windows Server or a Domain account the server trusts through Active Directory. By making the server a member of the domain, all trusted domain users will automatically be able to use their existing Windows credentials to log into TMS. Limiting what users can do once logged into

² Installation of these components may require the Windows Installation CD to complete depending on your type of installation.

TMS is still available through TMS permissions. Active Directory membership is the recommended deployment for most installations as it avoids creating local Windows accounts for each user.

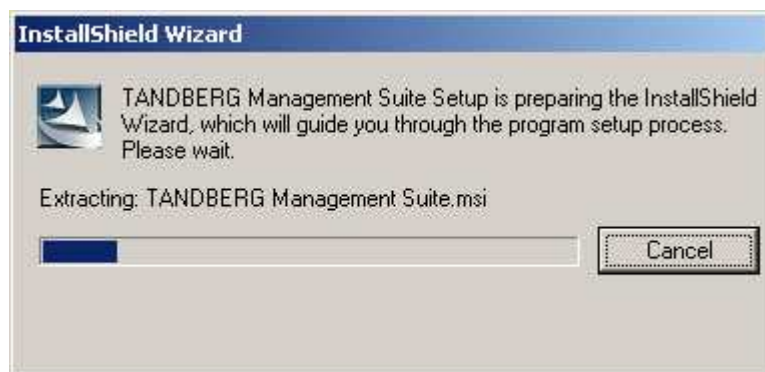
- **ASP.NET and ASP Enabled** – These IIS Components must be enabled. Windows 2008 users please see Appendix 1 for full details on IIS 7 components required
- **TMS Website Accessible by IP and Hostname** - Since not all devices support DNS hostnames or Port Numbers, the TMS website must be accessible by an IP Address on port 80. Some functionality requires TMS to be reachable by hostname so TMS should also be accessible by a fully qualified hostname as well.
- **Mail Server Access** -TMS requires access to a SMTP (Mail) server to be able to send emails out to users. TMS does not require its own SMTP server and can be configured to use your company's existing mail servers. TMS supports SMTP Auth login for authentication if required. If you are unsure which server to point TMS to, please contact your IT Administrator.
- **Network Access to Managed Devices** – TMS needs specific protocols and access to manage devices. Any network Firewalls or NAT routers must allow traffic to flow to and from TMS. The specific protocols and directions in use will vary based on devices being managed. Please see the TMS Product Support document (available on the TMS installation media) for specific on Firewall requirements for each type of supported device.

Note: Many Anti-Virus programs block applications from sending mail directly using the SMTP Port (TCP Port 25). Please verify your Anti-Virus program configuration and verify it will allow programs to send mail using the SMTP Port (TCP Port 25).

Installation or Upgrade of TMS Software Suite

Before you start the installation make sure that you have Administrator user rights and that you have your Windows CD-ROM available (CD may be required for installing some Windows components).

1. Close all open applications and disable virus-scanning software.
2. Ensure that you have installed the Microsoft .NET Framework version 3.5. The installer will check for this before allowing you to complete the installation.
3. Insert the TMS Software Suite CD-ROM into the CD-ROM drive. The Start page on the CD-ROM automatically starts. If CD does not auto start upon being inserted, select Browse.bat in the root directory on the CD-ROM.³
4. Click the **TANDBERG Management Suite** software link.
5. You will be prompted to select a Language to use for the TMS Installer. This language will be used only during the installation and does not affect TMS once installed. Select your Language and click 'Next'
6. The TANDBERG installer will prepare the installation wizard.



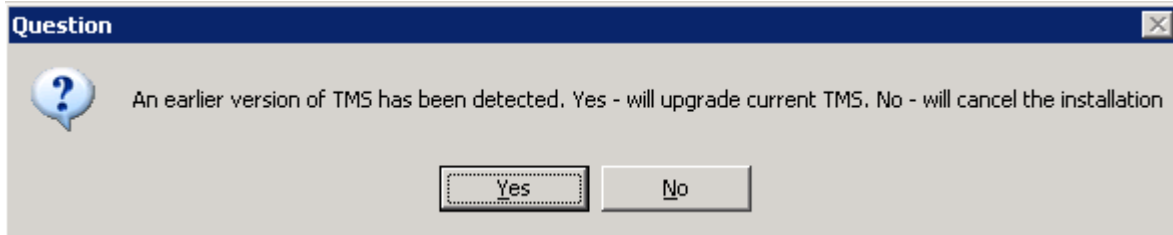
³ If you downloaded TMS as a compressed ZIP file, the ZIP file contents are identical to the CD-ROM's contents. Extract the ZIP to a folder on your computer to access the TMS installation media.

During the preparation, the installer will check if the server has the required software components installed. You may get a warning or error message depending on your server's configuration.



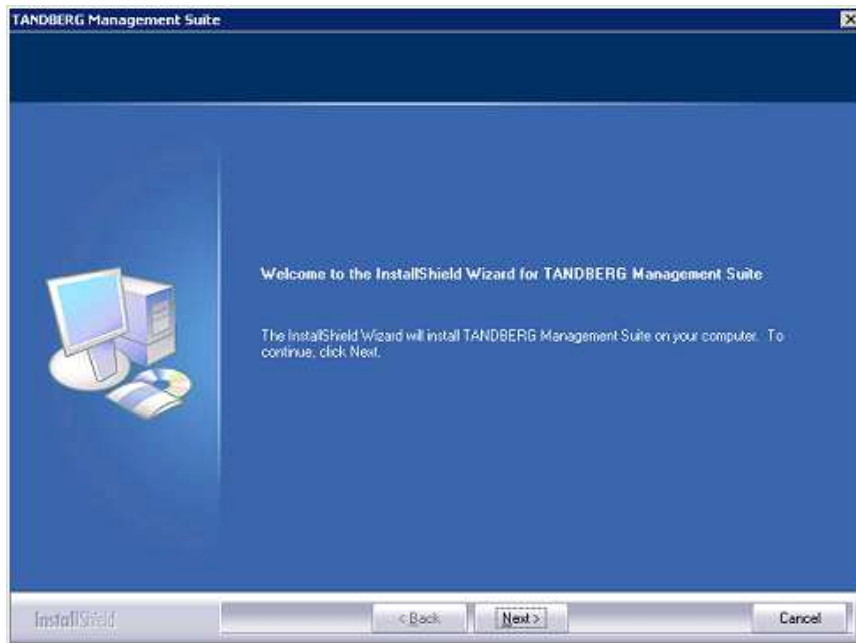
Example Error Message requiring the Installer be halted

- The installer will search for a previous installation of TMS. If an earlier version of TMS is currently installed, you will be prompted if you wish to upgrade the existing installation.



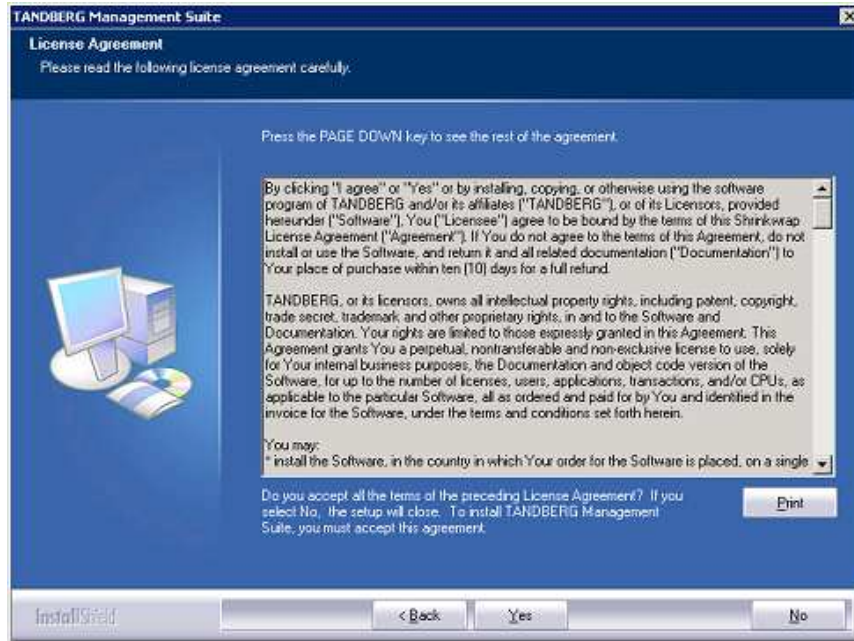
Click **'Yes'** to upgrade the current installation. Performing an upgrade will replace the existing version by removing the old version and upgrading the existing TMS database. Clicking **'No'** will abort the installation and leave the current installation untouched.

- A welcome window will appear on the screen. Press the **Next** button to continue. From this point forward you can cancel the installation at any time without further modification to an existing installation or server by clicking the **Cancel** button on any screen before the Summary page.



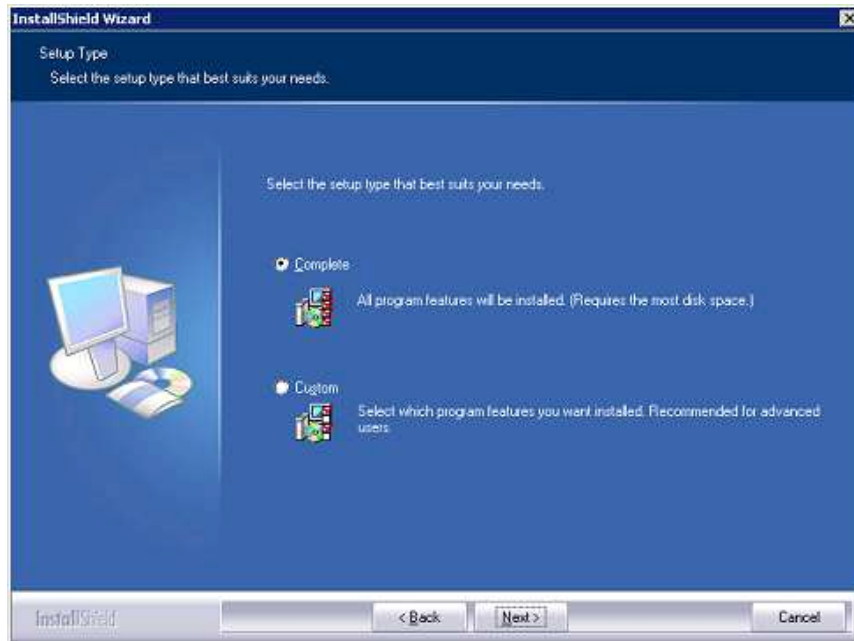
Welcome Screen

- Read through the license agreement and click **Yes** if you accept.



License Agreement

10. Choose Complete or Custom Installation.



Select Installation Type

- 'Complete' Performs the installation using TANDBERG defaults for settings with no extra options such as specifying the installation path or an external SQL Server. 'Complete' can still be used upgrades of existing installations for both local and remote SQL installations and is the recommended choice for performing upgrades.
- 'Custom' option will display all the installation choices available including specifying the installation path and SQL Server choices.

Make your selection and click **Next**. Please jump to [Steps for 'Custom' Installation Choice](#) if you chose Custom installation.

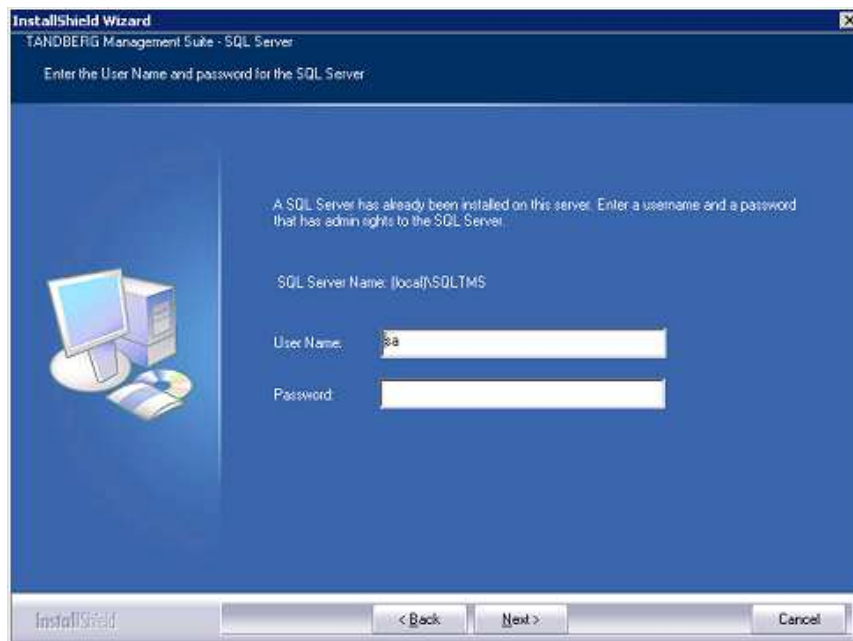
Steps for 'Complete' Installation Choice

11. The installer will try to locate an existing SQL Server and TMS database.

- The installer will look for an existing TMS database connection from earlier TMS installations. If found an existing database connection is found, the SQL Server specified is used. You will be prompted for a username and password to connect to the SQL server. Click **Next** to continue.
- If no existing TMS database connection is found, the installer will look for a SQL installation on the local server. If found, TMS will prompt for a user name and password to connect to the server so it can create a new TMS database. Click **Next** to continue.
- If no existing TMS database connection or local SQL server is found, the installer will install a local copy of SQL Server 2005 Express Edition and create a new TMS database. The installer will prompt you for a password to set for the SA account (administrator) for the new SQL Server installation. Click **Next** to continue.

NOTE: The SA password must be retained as it is required for future upgrades or TMS maintenance!

NOTE: If you have the TMS server in a domain or you have a local policy that has a strong password policy, you must ensure that you use a strong password for the SQL installation.

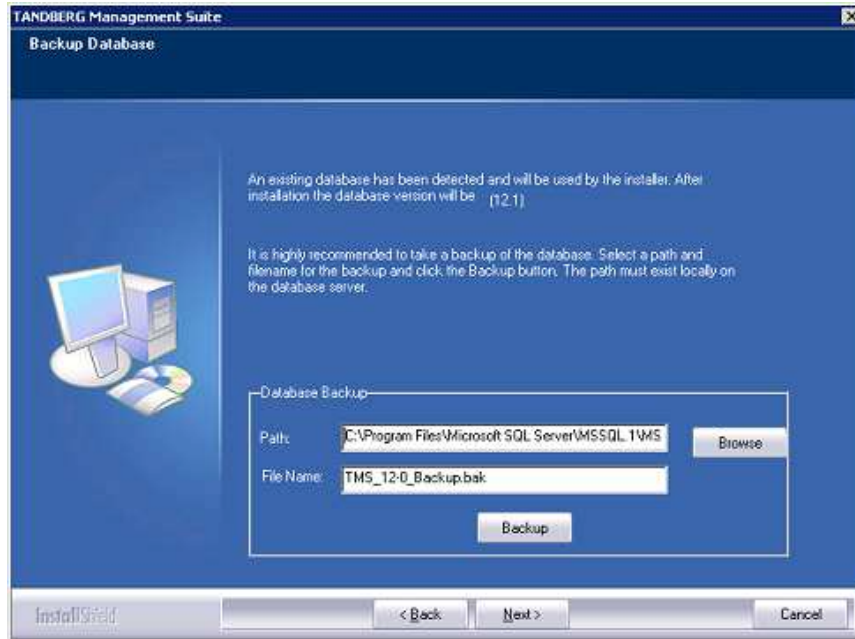


Connecting to an Existing SQL Server

12. If an existing TMS database is found on the SQL server, you will be prompted if you want to re-use the existing database. If the database is an older version and you select 'Yes', TMS will automatically update the existing database to the current version and retain the existing information. If you choose 'No', the installer will quit and you must manually remove the database from the SQL server if you wish to use that SQL Server. Please ensure you have reviewed [Upgrading From a Previous TMS Version](#) of this document before proceeding with an upgrade to ensure you are prepared for any additional steps or changes that must be performed based on your previous TMS version.
13. If an existing database is found, the installer will recommend you take a backup of the database before it is upgraded. The backup is optional, but recommended. To skip the backup, simply click **Next**

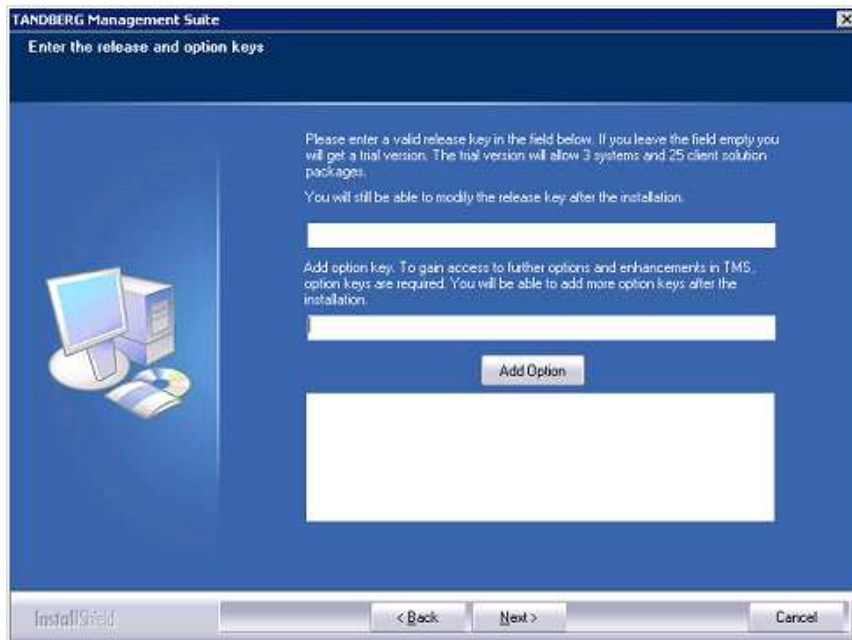
To perform the backup, enter a path for the backup file and filename or use the Browse button to Navigate to a folder. The backup is done on the SQL Server itself, so these values are local to the

SQL Server. Click **Backup** to initiate the backup. You will get a notice when the backup is complete (may take several minutes). When complete, click **Next** to continue the installation.



Backup Existing Database

- The next page allows you to enter your release key and your option keys for enabling additional systems or additional feature support such as Network Integration or other external integration packages. If upgrading from an existing version, your existing keys will be shown. A new release key is required when upgrading to a new major release. For questions regarding your release or option keys, please contact your TANDBERG Reseller or TANDBERG Support.



Enter Release and Option Keys

If no release key is entered, TMS will install an evaluation version of TMS which includes support for 3 systems for TMS and TANDBERG Scheduler.

Your release key must be entered before attempting to add Option keys. To add an option key, click the **Add Option** button and enter the key. Keys will be validated before being added to the list. Option keys can also be added post-installation on in the Administrative Tools page in TMS.

Click **Next** when finished entering keys.

The next two screens allow you to pre-configure some default settings to allow TMS to immediately start operating for a basic network configuration. If configured properly, TMS can automatically discover, monitor, log, provide phonebooks, and schedule a basic existing H.323/SIP network. These defaults are to allow a simple network to get up and running quickly and be able to use TMS's main features.

To tune the installation or configure TMS for more advanced networks, you will add further information to TMS and tune these settings in the Getting Started section of this document. All of the settings in the next screens can be further modified once TMS is installed.

15. The Network Settings screen is to configure some essential network defaults to allow TMS to function. If performing an upgrade, the values will be populated with those from the existing database. These settings can also be updated post-installation on the Administrative Tools pages of TMS.

Network Settings

- **TMS Server IP Address** – Verify this is the IP address of the local server. It will be populated automatically if possible.
- **TMS Server IPV6 Address** – Verify this is the IPV6 address of the local server. It will be populated automatically if possible. If IPV6 is not enabled on the Windows Server, this field can be left blank.
- **IP Broadcast Address [...]** – Enter the broadcast address for the networks you wish TMS to automatically search for devices. Systems TMS discovers can be automatically added to TMS with their management settings added. Multiple broadcast addresses can be entered and separated by commas. TMS will search networks by sending a SNMP Discovery packet to the supplied addresses. The default value will be the broadcast address of the TMS server's network.
- **Enable automatic registration of systems in TMS** – If enabled, systems TMS discovers on the network will automatically be added into a folder in TMS and have their management settings configured. The default value is enabled.
- **Sender Email Address** – Enter the mail address you wish to appear as the 'FROM' mail address in emails sent by TMS. Example: videomanagement@company.com

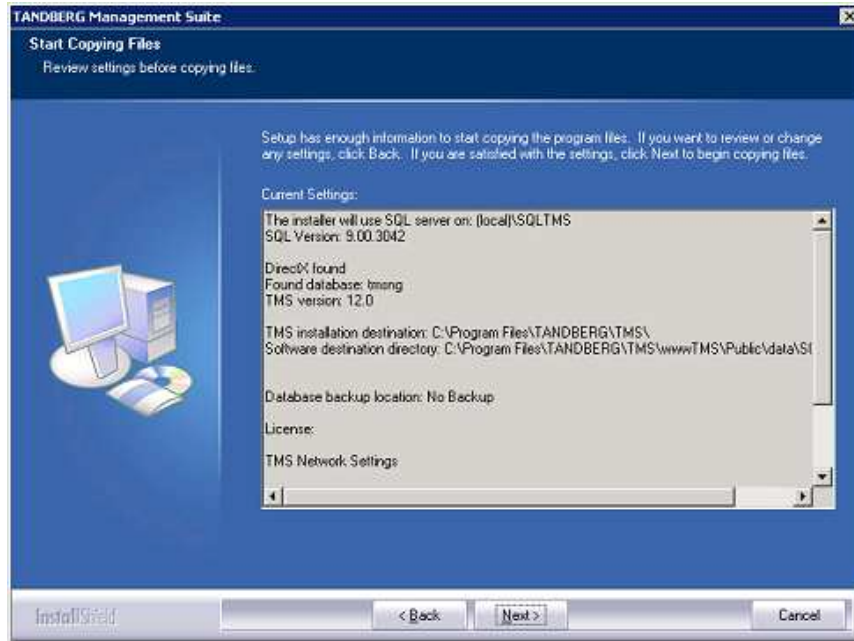
- **SMTP Server IP Address** – Enter the network address of the SMTP server TMS will use to send emails. Additional authentication configuration settings if needed will be setup post-installation.
16. Click **Next**. When leaving this screen, TMS will try to contact the supplied SMTP Server to verify the setting and warn you if it was not able to contact the server.
 17. The next screen includes basic defaults for devices and users. Zones are a TMS configuration concept TMS uses to route Phone numbers and aliases when scheduling calls and using Phonebooks. The information entered here will create the first IP Zone and ISDN zone in TMS which will be set as the initial default in TMS. Default zones created here in the installer allow a basic IP network to operate immediately after installing TMS. Additional zones and configurations are added post-installation for networks with multiple locations or more complex elements. The values entered should represent the systems you intend to start with in TMS.

Default Zone Information

- **Name** – The name to assign to the zones. Should be descriptive, normally referencing the city or building
- **Country** – Select the Country this zone is located in. This is used for ISDN dialing information
- **Area Code** – Enter the Area Code (if applicable) for the location. This is used for ISDN dialing information
- **To access an outside line [..]** – If you must dial a prefix to reach an outside line on your ISDN circuits, enter it here. This is used for ISDN dialing information.
- **Default Time Zone** – This time zone will be the default used for new systems and users. Chose the most appropriate from the list for your users and systems. Specific settings can be changed later for each user or device.

Click **Next** to proceed once all fields have been completed

18. TMS is now ready to install. A Summary page is displayed with all the settings you have chosen. Verify all settings and click **Next** when ready to proceed.



Summary of Settings

NOTE: You may be prompted to reboot the server more than once to complete the installation depending on Windows components that may need to be added. If this is required, the installer will automatically resume after the server reboots.

This completes the installation of the software component of TMS. You should now proceed to [Getting Started with TMS](#) to further configure and tune TMS to your individual needs. The remainder of this section covers the steps if the 'Custom' installation option were chosen.

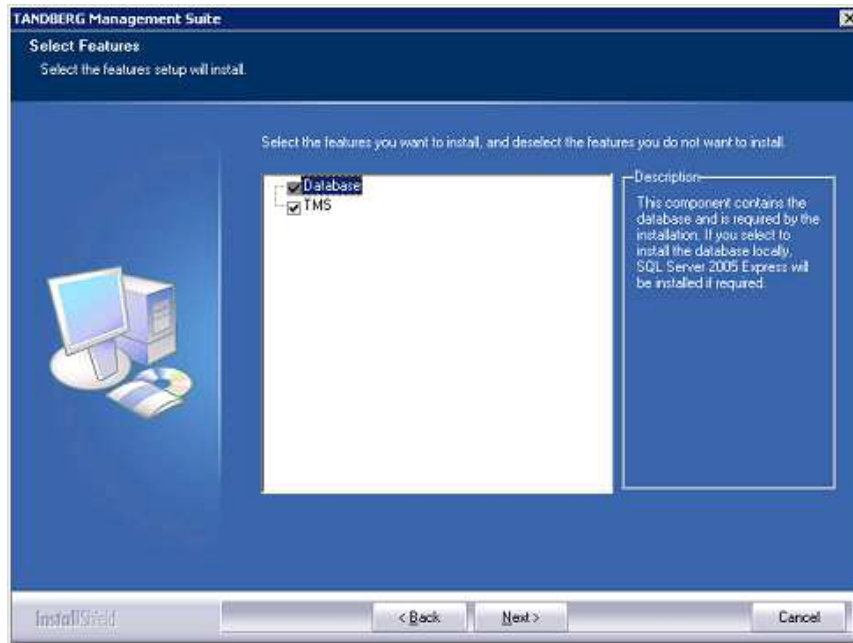
Steps for 'Custom' Installation Choice

Follow the steps in this section if you chose 'Custom' for your installation type



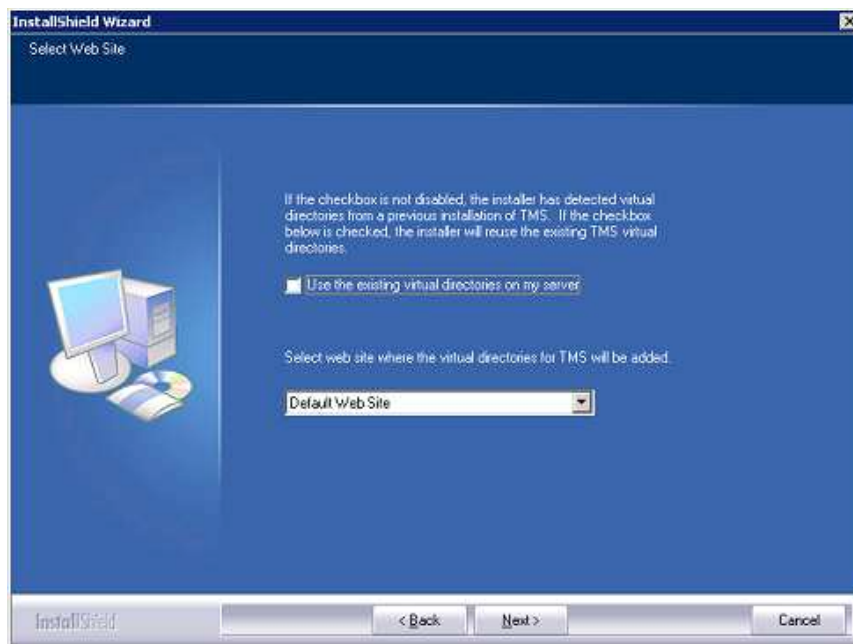
Select Installation Type

1. Choose which components to install. Deselecting TMS will only install SQL Server 2005 Express Edition and the TMS database, if needed. Click **Next** to continue.



Select Components to Install

2. Select the Web Site to install into. By Default TMS will install itself by creating a virtual directory in the Default Web Site. If you wish to install TMS into another IIS Web Site besides the Default Web Site, select the Web Site from the drop-down menu.



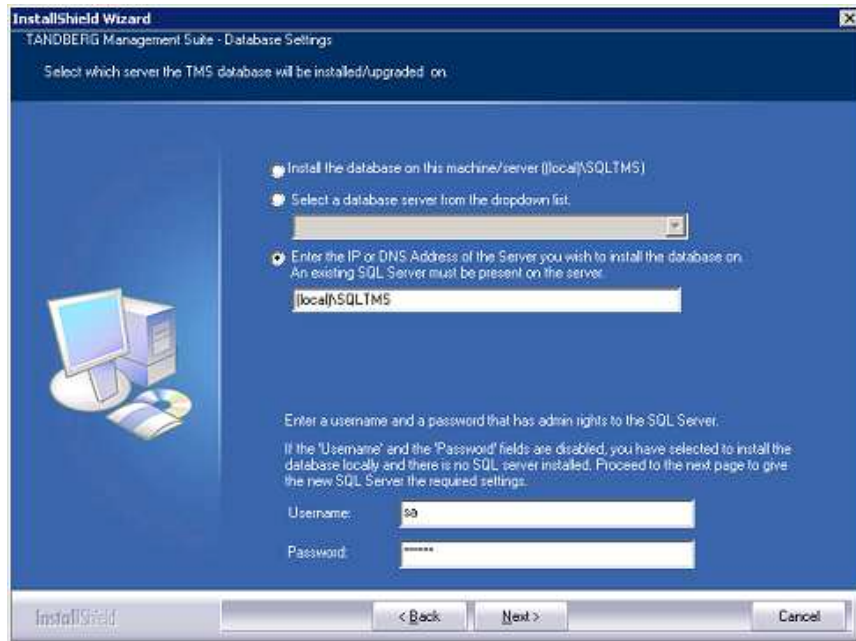
Select IIS Web Site

The installer will detect previous installations of the TMS virtual directories within the IIS server. If you wish to reuse the existing virtual directories, select the checkbox entitled 'Use the existing virtual directories on my server' in order to preserve these existing virtual directories. If there are no existing virtual directories used by TMS on the server, the check box enabling you to preserve the virtual directories will be disabled.

Note: To be able to use TMS on a Web Site, it must be accessible by its own IP Address on port 80. Some functionality requires TMS to be reachable by hostname so the website should also be accessible by a fully qualified hostname.

Make your selections and click **Next**.

3. The next page will allow you to select which SQL server to use. Select from one of the options described below



Select SQL Server Option

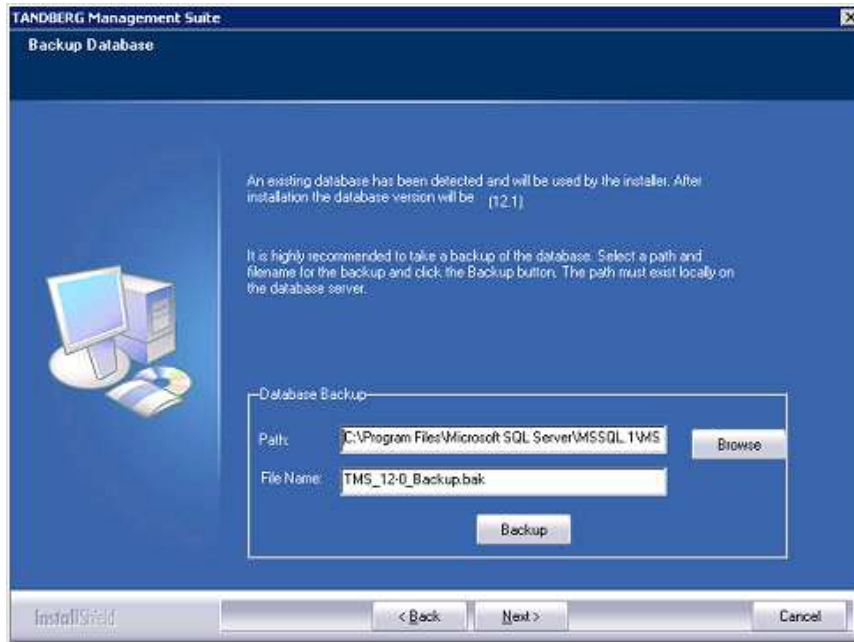
- **Install Database on this machine... (instance name)** – Select this option to install the database on a SQL Server on the local server. If the installer finds an existing SQL install, the name of the instance will be shown in the text and you must supply the SQL Login and password to use at the bottom of the screen. If no local install was found, using this choice installs a new named instance of SQL Server 2005 Express Edition.
- **Select a Database Server from ...** - This drop down list will list all SQL Servers the installer was able to locate browsing the network. To install on an existing remote SQL server, select the server from the dropdown list. If you cannot find the server you are looking for, use the next option.
- **Enter the IP or DNS Address of the Server...** - Use this option to install the TMS database on an existing remote SQL Server and the server was not listed in the dropdown. Use the standard Microsoft SQL conventions to specify named instances. Example: **sql1.company.com\vidgrp** If you are unsure of what to enter for your existing SQL server, please see your SQL Server Administrator.

Username/Password – If you selected an existing SQL Server above, enter the SQL Login to access the SQL Server specified. The user specified will be used to create and/or access the TMS database. If you selected to install a new SQL Server locally, these fields will be disabled and a separate page to set a new SA password for the database server will be shown after you click **Next**.

Make your selections and click **Next** to continue.

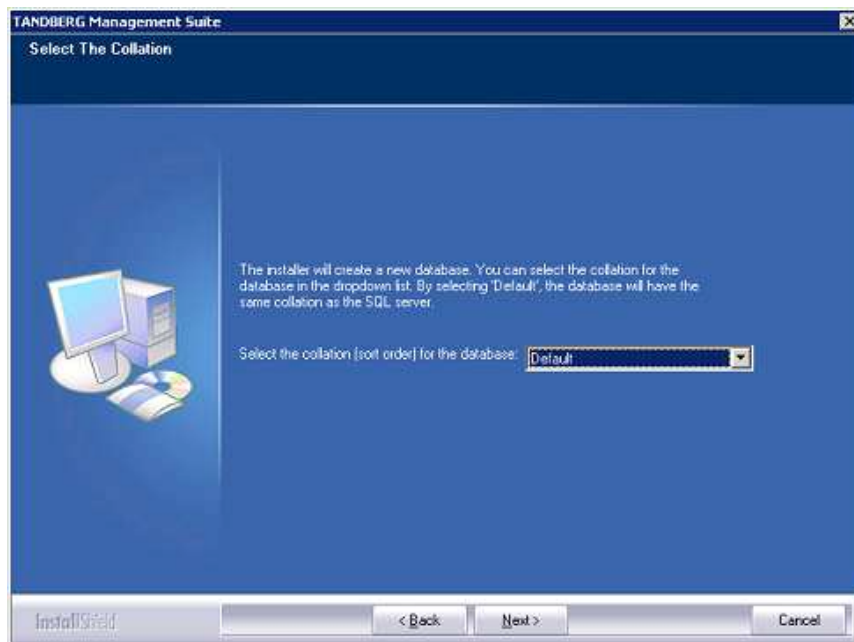
4. If an existing TMS database is found on the specified SQL server, you will be prompted if you want to re-use the existing database. If the database is an older version and you select 'Yes', TMS will automatically update the existing database to the current version and retain the existing information. If you choose 'No', the installer will quit and you must manually remove the database from the SQL server if you wish to use that SQL Server. Please ensure you have reviewed [Upgrading From a Previous TMS Version](#) of this document before proceeding with an upgrade to ensure you are prepared for any additional steps or changes that must be performed based on your previous TMS version.
5. If an existing database is found, the installer will recommend you take a backup of the database before it is upgraded. The backup is optional, but recommended. To skip the backup, simply click **Next**

To perform the backup, enter a path for the backup file and filename or use the Browse button to Navigate to a folder. The backup is done on the SQL Server itself, so these values are local to the SQL Server. Click **Backup** to initiate the backup. You will get a notice when the backup is complete (may take several minutes). When complete, click **Next** to continue the installation.



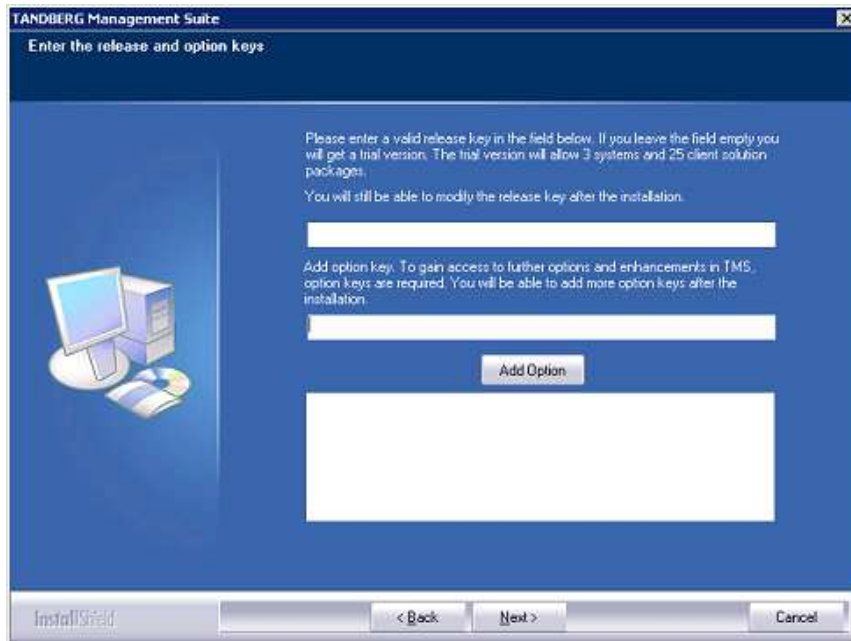
Backup Existing Database

6. If the selected SQL server contains no TMS database, you will be able to select a collation for the new TMS database. By default the collation is the same as the SQL server.



Database Collation

7. The next page allows you to enter your release key and your option keys for enabling additional systems or additional feature support such as Network Integration or other external integration packages. If upgrading from an existing version, your existing keys will be shown. A new release key is required when upgrading to a new major release. For questions regarding your release or option keys, please contact your TANDBERG Reseller or TANDBERG Support.



Enter Release and Option Keys

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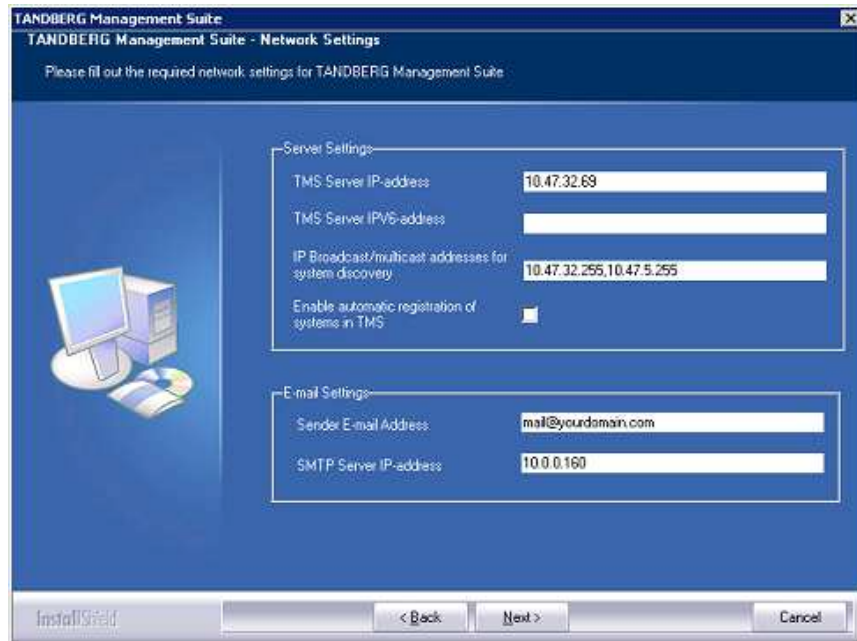
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To tune the installation or configure TMS for more advanced networks, you will add further information to TMS in the Getting Started section of this document. All of the settings in the next screens can be further modified once TMS is installed.

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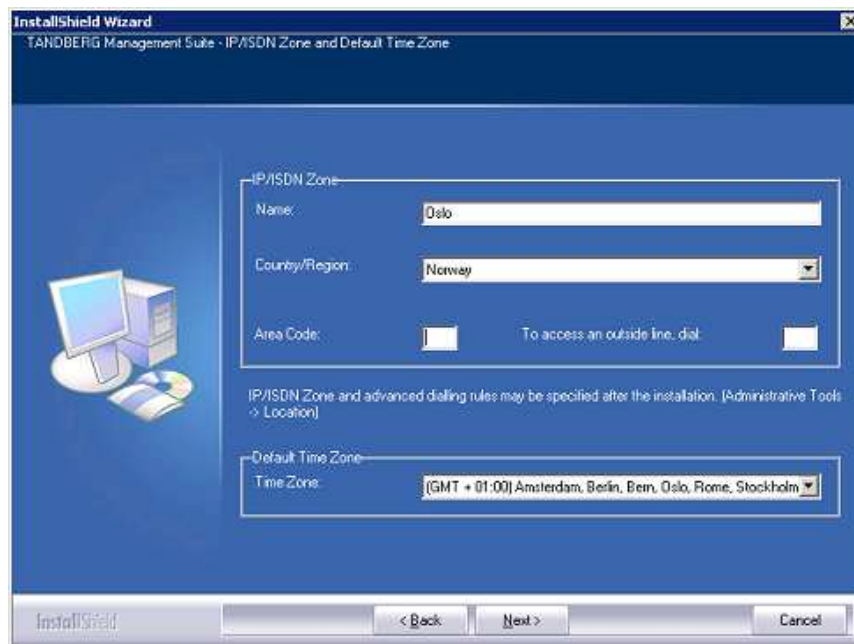


Network Settings

- **TMS Server IP Address** – Verify this is the IP address of the local server. It will be populated automatically if possible.
- **TMS Server IPV6 Address** – Verify this is the IPv6 address of the local server. It will be populated automatically if possible. If IPv6 is not enabled on the Windows Server, this field can be left blank.
- **IP Broadcast Address [...]** – Enter the broadcast address for the networks you wish TMS to automatically search for devices. Systems TMS discovers can be automatically added to TMS with their management settings added.. Multiple broadcast addresses can be entered and separated by commas. TMS will search networks by sending a SNMP Discovery packet to the supplied addresses. The default value will be the broadcast address of the TMS server's network.
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- **Sender Email Address** – Enter the mail address you wish to appear as the 'FROM' mail address in emails sent by TMS. Example: videomanagement@company.com
- **SMTP Server IP Address** – Enter the network address of the SMTP server TMS will use to send emails. Additional authentication configuration settings if needed will be setup post-installation.

Click **Next**. When leaving this screen, TMS will try to contact the supplied SMTP Server to verify the setting and warn you if it was not able to contact the server.

9. The next screen includes basic defaults for devices and users. Zones are a TMS configuration concept TMS uses to route Phone numbers and aliases when scheduling calls and using Phonebooks. The information entered here will create the first IP Zone and ISDN zone in TMS which will be set as the initial default in TMS. Default zones created here in the installer allow a basic IP network to operate immediately after installing TMS. Additional zones and configurations are added post-installation for networks with multiple locations or more complex elements. The values entered should represent the systems you intend to start with in TMS.

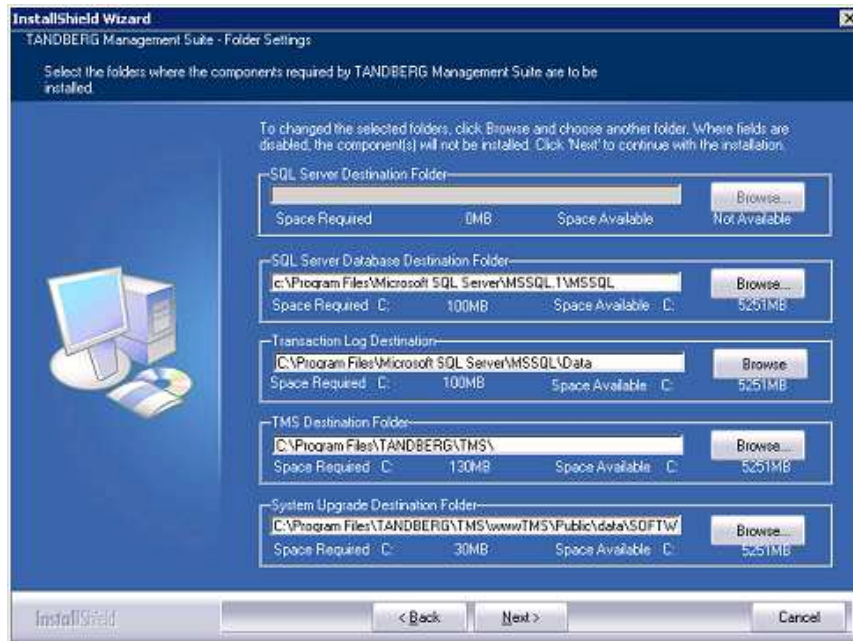


Default Zone Information

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- **Country** – Select the Country this zone is located in. This is used for ISDN dialing information
- **Area Code** – Enter the Area Code (if applicable) for the location. This is used for ISDN dialing information
- **To access an outside line [..]** – If you must dial a prefix to reach an outside line on your ISDN circuits, enter it here. This is used for ISDN dialing information.
- **Default Time Zone** – This time zone will be the default used for new systems and users. Chose the most appropriate from the list for your users and systems. Specific settings can be changed later for each user or device.

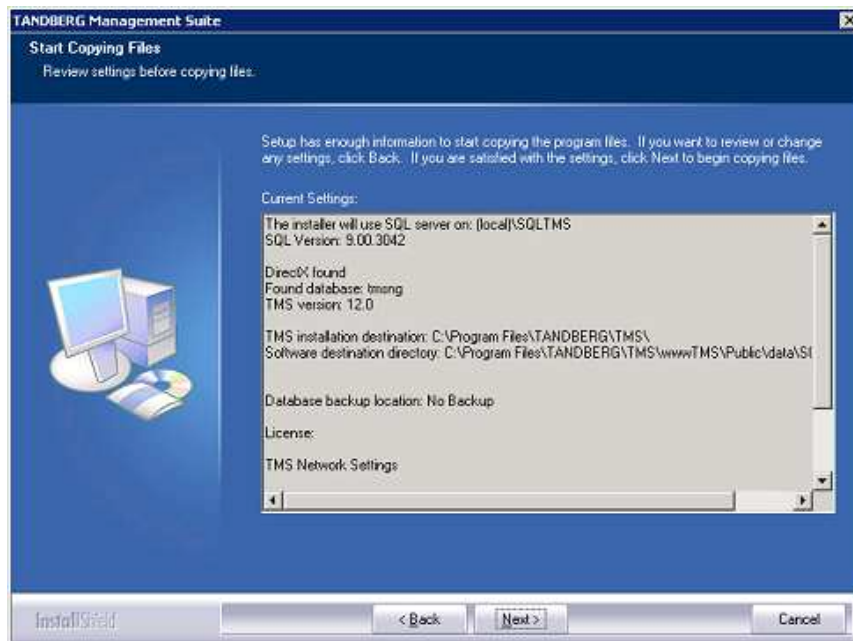
Click **Next** once all fields have been completed

10. The next screen allows you to specify Installation paths and directories to use for the installation. Fields that cannot be modified because the software is already installed will be grayed out.



Specify Installation Paths

11. TMS is now ready to install. A Summary page is displayed with all the settings you have chosen. Verify all settings and click **Next** when ready to proceed.



Summary of Settings

NOTE: You may be prompted to reboot the server more than once to complete the installation depending on Windows components that may need to be added. If this is required, the installer will automatically resume after the server reboots.

This completes the installation of the software component of TMS. You should now proceed to [Getting Started with TMS](#) to further configure and tune TMS to your individual needs. The remainder of this section covers the steps if the 'Custom' installation option were chosen.

Upgrading From a Previous TMS Version

Upgrading of the TMS software itself is handled automatically by the TMS installer. Step by step instructions for running the installer are provided in the previous section of this document, but additional steps may be required to complete the upgrade depending on the previous version used.

Additionally, there may be changes in supported versions or dependencies for other products or integrations that interact with TMS. This section will outline any requirements and additional steps administrators will to consider and complete when performing a TMS version upgrade.

This section is broken into two topics

- [Compatibility with Existing Integration Products](#)
- [Version Specific Upgrade Notes](#)

Administrators should review this section **before** starting a TMS upgrade to ensure the smoothest upgrade process.

Compatibility with Existing Integration Products

Compatibility with TANDBERG Integration Products for TMS does not change from TMS 12.0 to TMS 12.1. A full list of compatible versions is listed below. **NOTE:** The most recent version may be required to realize all features and fixes.

TMS Integration Compatibility Matrix

Product	Compatible Version
TANDBERG See&Share	v3.3
TANDBERG Microsoft Exchange Integration	All Versions
TANDBERG Microsoft LCS Integration	All Versions
TANDBERG Conferencing eXtensions	All Versions
TMS – IBM Lotus Notes Integration	All Versions
TMS - IBM Lotus Sametime Integration	All Versions
TANDBERG Movi for IBM Lotus Sametime	All Versions
TANDBERG 3 rd Party Booking API	All Versions

Version Specific Upgrade Notes

The upgrade process of all previous versions of TMS follows the same principles, but additional steps may be required depending on the version you are currently running. Please be sure to review any version specific notes listed below for the version of TMS you are currently running before starting your TMS upgrade.

Note: Most TMS fixes included for problems related to how scheduled calls are booked do not alter existing conferences. If you are experiencing an issue with a previously booked series of meeting, fixes in your newly upgraded version may not apply to the existing conferences that have yet to execute. This is exaggerated when customers have long series of recurring meetings scheduled from a much older version of TMS. To ensure scheduling fixes are applied to a previously booked series of conferences, open the conference in the List Conferences page. Chose to edit the full series, and click on the Conference Settings page, then save the meeting. This will force the meeting to be updated, ensuring any current fixes are incorporating into the scheduling.

Notes for Upgrades from TMS 12.0

Customers who had VCS clusters defined in TMS 12.0 should review the clustering section of the Provisioning Directory Deployment Guide (found on the TMS installation media) for instructions on changes to cluster configuration with VCS X4.1 software.

Customers who plan on using the Provisioning Directory and Movi should review the Provisioning Directory Deployment Guide to understand the software dependencies between TMS and VCS.

Customers who were participating in the Movi Beta should refer to their Beta Community Point of Contact for specific upgrade instructions.

Notes for Upgrades from TMS v11.x

The Server requirements for TMS have changed since these TMS versions, including removing support for Windows 2000 Server and Microsoft SQL Server 2000. Please read the [TMS 12.0 Server OS Changes](#) section for additional details and assistance on upgrading your Server components.

Customers running external integrations must ensure their software is compatible with the new version of TMS or upgrade to the current version. Please see [TMS Integration Compatibility Matrix](#) for version details.

Customers using TANDBERG Content Servers with TMS, the servers must be running software greater than S2.0. TMS 12.1 is compatible with the most recent Content Server software at the time of this writing which is S3.2. Upgrading from versions prior to S2 require updating the configuration between the servers and updating any future bookings. Additional help to perform these tasks is provided in the Supplement Notes for Manuals section of the TMS v11.6 release in document D50418 TMS v11 Release Notes. TMS Version 11 Release Notes are available from the TANDBERG website.

Starting with TMS v12.0, the permissions were slightly reorganized compared with previous versions. Administrators who implement different user levels through permissions should review their user group permissions after upgrading to TMS v12 and adjust the permissions to their intended settings.

Additional notes for Upgrades from versions 9.x and 10.x

The Server requirements for TMS have changed since these TMS versions, including removing support for Windows 2000 Server and Microsoft SQL Server 2000. Please read the [TMS 12.0 Server OS Changes](#) section for additional details and assistance on upgrading your Server components.

Customers running external integrations must ensure their software is compatible with the new version of TMS or upgrade to the current version. Please see [TMS Integration Compatibility Matrix](#) for version details.

TMS has gone through significant changes since these releases and while the TMS installer will import existing data, there are many new settings and existing settings that have changed. Administrators must walk through the Administrative Tools settings in TMS once installed to populate and update TMS's configuration to their environment's needs before considering the upgrade complete. Of particular importance is that the permissions model has been overhauled and Group Permissions and System Permissions should be reviewed and updated to match your needs. Administrators can expect inconsistent behavior between different systems until TMS has refreshed the configuration of each system – normally this will happen automatically within 1-4 hours for most installations.

Additional notes for Upgrade from versions prior to 9.x

For installations older than TMS 9.0, the TMS installer will import your existing data, but TANDBERG recommends a new installation versus performing an upgrade. Server requirements have changed significantly since these versions as well as the configuration and functionality throughout the product making most direct upgrades significantly more complex than simply performing a new installation on a new host server.

TMS 12.0 Server OS Changes

Windows Server 2000 is no Longer supported

Starting with TMS version v12, Microsoft Windows Server 2000 (all versions) is no longer supported as an operating system for the server running TMS. This is due to Microsoft not supporting Windows

Server 2000 in the Microsoft .NET 3.5 Framework and that Mainstream support from Microsoft expired several years ago. Customers running TMS on a Windows Server 2000 OS, must first upgrade their server to Windows Server 2003 before installing TMS v12 or newer. Microsoft recommends performing a clean install when upgrading to Windows 2003 for the best security defaults.

To install on a new server or to allow the existing server to be formatted and have Windows Server 2003 installed, the TMS database should be backed up, along with any customized customer files and stored off the server. Once the server is upgraded, reinstall the original TMS version and restore the TMS database backup. Once your existing TMS installation is up and running, you can proceed to upgrade to TMS v12 or newer. Additional assistance on backing up and restoring TMS can be found in the *TMS Database Knowledge Base Tips* document available on the TMS installation media.

Microsoft SQL Server 2000 No Longer Supported

Starting with TMS v12, SQL Server 2000 (all versions) is no longer supported as a database server for TMS. This change is due to features required for TMS v12 that are not supported in SQL Server 2000 and that SQL 2000 is no longer under Mainstream Support from Microsoft. Customers who are currently running TMS using a SQL 2000 based server (including MSDE 2000 installed by the TMS Installer) must upgrade to a SQL 2005 server before installing TMS v12 or newer. Additional assistance on performing this upgrade is provided in the *TMS Database Knowledge Base Tips* document available from the TMS installation media. Once your existing TMS installation is up and running using a SQL 2005 server, you can proceed to upgrade to TMS v12 or newer.

Customers wishing move the TMS database to a new server, should move the database and or database server prior to running the TMS v12 installer. In order to do this, use the standard Microsoft SQL tools (the TMS database is named 'tmsgng'), and then select 'Custom' during the TMS v12 installation. When 'Custom' is selected the user will have the option to specify the database location.

Microsoft .NET Framework 3.5 now required

TMS v12 or newer requires the Microsoft .NET Framework version 3.5 be installed prior to installing TMS. Previous versions of TMS required v2 of the .NET Framework and the .NET version would be installed by the TMS installer automatically if required. Due to the substantially increased size of the new .NET 3.5 installer, the .NET installation is no longer part of the automatic installation process. The TMS Installer will check if .NET 3.5 is installed and if not, stop and prompt the user to install .NET 3.5 before retrying the TMS installation. The .NET 3.5 installer is provided on the TMS installation media and is a simple, automated install. TMS Appliance Users please see [The TANDBERG Management Server Appliance](#) section of this document for an important step required to complete the .NET 3.5 installation.

The TANDBERG Management Server Appliance

The TANDBERG Management Server Appliance is TANDBERG provided server hardware that comes with the TANDBERG Management Software Suite pre-installed. This combination allows administrators to deploy TMS without the burden of procuring, configuring, or installing their own server and operating system. The TANDBERG Management Server is intended for use by small to medium sized networks (up to 100 managed systems) and includes all necessary software pre-installed to operate.

This section includes four topics

- [Pre-Installation Considerations for Management Server](#)
- [First time setup and configuration of the TANDBERG Management Server](#)
- [Operation, Maintenance, and upgrading the TANDBERG Management Server](#)
- [TMS Software Installation/Upgrades on the TANDBERG Management Server](#)

For information regarding the configuration of the TMS application itself, please see [Getting Started with TMS](#) of this manual as well as the *TMS Administrator Guide* for further information.

Pre-Installation Considerations for Management Server

Client Software Requirements

The Management server is accessed via a web interface for both administrators and users. The following are the software requirements for users to access the TMS application:

Minimum requirements:

- Microsoft Internet Explorer 6.0 or later
- Mozilla Firefox 2.0 or later
- Java Virtual Machine Runtime Engine (JRE) 1.5.0 or later
- A Windows Username and Password to the TMS Server (Local Machine Account or Domain account if server is joined to a domain)

Recommended requirements:

- Microsoft Internet Explorer 7.0 or later
- Mozilla Firefox 2.0 or later
- Java Virtual Machine Runtime Engine (JRE) 1.5.0 or later

A Java Virtual Machine Runtime Engine (JRE) is required for using the Monitoring pages in TMS. If not installed, most browsers will prompt to download and install the browser plug-in automatically from the Internet. If this is not possible due to security restrictions, the JRE may be installed manually on the client computer from the JRE installation file which can be downloaded from <http://www.java.com> and is included on the TMS installation media for convenience.

Server Network Requirements

While the Management Server is a self-contained server, it has some network dependencies that must be considered

- **Domain Membership Preferred** – Each user logging into TMS needs a Windows User Login to authenticate to the website. Users must have either a local account on the TMS Windows Server or a Domain account the server trusts through Active Directory. By making the server a member of the domain, all trusted domain users will automatically be able to use their existing Windows credentials to log into TMS. Limiting what users can do once logged into TMS is still available through TMS permissions. Active Directory membership is the recommended deployment for most installations as it avoids creating local Windows accounts for each user.

- **TMS Website Accessible by IP and Hostname** - Since not all devices support DNS hostnames or Port Numbers, the TMS website must be accessible by an IP Address on port 80. Some functionality requires TMS to be reachable by hostname so TMS should also be accessible by a fully qualified hostname as well.
- **Mail Server Access** -TMS requires access to a SMTP (Mail) server to be able to send emails out to users. TMS does not require its own SMTP server and can be configured to use your company's existing mail servers. TMS supports SMTP Auth login for authentication if required. If you are unsure which server to point TMS to, please contact your IT Administrator.
- **Network Access to Managed Devices** – TMS needs specific protocols and access to manage devices. Any network Firewalls or NAT routers must allow traffic to flow to and from TMS. The specific protocols and directions in use will vary based on devices being managed. Please see the TMS Product Support document (available on the TMS installation media) for specific on Firewall requirements for each type of supported device.

Note: Many Anti-Virus programs block applications from sending mail directly using the SMTP Port (TCP Port 25). Please verify your Anti-Virus program configuration and verify it will allow programs to send mail using the SMTP Port (TCP Port 25).

First time setup and configuration of the TANDBERG Management Server

Installation Precautions and Hardware Compliances

Safety Precautions:

- Never install communication wiring during a lightning storm.
- Never install jacks for communication cables in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninstalled communication wires or terminals unless the communication line has been disconnected at the network interface.
- Use caution when installing or modifying communication lines.
- Avoid using communication equipment (other than a cordless type) during an electrical storm. There may be a remote risk of electrical shock from lightning.
- Do not use the communication equipment to report a gas leak in the vicinity of the leak.
- Always connect the product to an earthed socket outlet.
- The socket outlet shall be installed near to the equipment and shall be easily accessible.
- Never install cables without first switching the power OFF.

This product complies with the following directives:

- LVD 73/23/EC, EMC 89/366/EEC, R&TTE 99/5/EEC,
- Directive 73/23/EEC (Low Voltage Directive)
- Standard EN 60950-1
- Directive 89/336/EEC (EMC Directive)
- Standard EN 55022, Class A
- Standard EN 55024
- Standard EN 61000-3-2/-3-3
- Approved according to UL 60950-1 and CAN/CSA C22.2 No. 60950-1-03
- Complies with FCC15B Class A