ADTRAN®

NetVanta Unified Communications

Release Notes

Version 5.3.0

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Table of Contents

These release notes highlight new functionality, enhancements, software and hardware dependencies, and include upgrade instructions for the NetVanta Unified Communications product family. This document is to be used in conjunction with product documentation and training for the preparation of new and existing software installations and is intended for technical professionals who are providing support services for NetVanta Unified Communications products.

For general product information, please visit ADTRAN's website at http://www.adtran.com.

> **CAUTION:** It is strongly recommended that the contents of this document be reviewed before any installation or upgrade, no matter how familiar the installer is with the product, to ensure that current installation and upgrade procedures are followed. These procedures could change from release to release, including maintenance releases. Failure to follow the upgrade procedures in this document could result in non-operational systems.

1 Summary of Changes

This section summarizes new functionality introduced in this NetVanta UC Server release, along with issues resolved in each release and any release-specific actions that are required as part of upgrading. Each maintenance release is identified separately. More detailed descriptions for major new functionality follow in Section 2 New Functionality Details,. Internal tracking numbers are noted (for example, [1234]).

For newly introduced functionality and issues resolved in previous major releases, please consult the release notes or product documentation for the respective releases.

Where functionality or issues resolved do not apply to products in the product family, the applicable products are noted (for example, ECS, BAS, UCS).

NOTE: Be sure to review all upgrade actions for all releases between your current release and the release and your upgrade. Subsections of the sections below identify required actions, including information about client upgrades.

1.1 Release 5.3.0

Release 5.3.0 is a release update of NetVanta UC Server version 5.2.x which extends all existing functionality and adds GUI support for Business Continuity paired with Stateful Proxy Class of Services management, and extends French Language support via both ucCompanion and User voice selection.

This release additionally adds an upgraded SIP stack for improved reliability of UC Softphone and Paging Server as well as support for Called Party Display and additional extended ASCII character capabilities through the Dial by Name element for French language feature improvements.

Additional interoperation with ADTRAN products namely the NetVanta 7100, the TA9xx series and SBC Feature Packs are now also supported. ECS, BAS, UCS

2   New Functionality Details

This section describes the new functionality introduced in this NetVanta UC Server release. Where functionality or issues resolved do not apply to products in the product family, the applicable products are noted.

2.1   Release 5.3.x

NetVanta UC Server Release 5.3.0 is a minor release which incorporates all existing features and functionality of past NetVanta UC Server releases combined with the introduction of the following features:

Business Continuity Support

Business Continuity (BC) provides the functionality to UC Server using redundancy to eliminate a single point of failure and maintain voice and UC services during system or network outages. In the event of a failure, the primary UC Server services will be provided by a secondary configured UC Server host. The feature includes the handling of voice calls as well as UC and voicemail functionality in a failed state with limited feature set availability. The server now includes the ability to manage BC settings via the Admin UI interface along with advanced synchronization and scheduling settings. This scheduled resynchronization method allows for Primary Server failure and recovery. It also allows the ability to take one system out of service, upgrade its software and then return to service followed by the upgrade of the second server. This is a licensed UC feature. ECS only

Stateful Proxy and Phone Configuration Class of Service (COS)

This feature provides the ability to set Stateful Proxy configuration settings through the Administrator User Interface both on a per phone basis and via the associated Class of Service (COS). The settings also include the configuration support of an Outbound Proxy destination for local gateway survivability of Polycom handsets and for Stateful Proxy mode support of Polycom and snom phone types. The support of this feature works in concert with AOS proxy model in support of the Business Continuity feature set.   ECS BCS

ucCompanion French UI

This enhancement adds support of ucCompanion desktop client in the French language. All features of ucCompanion including the various UI dialogues as well as the client settings will be provisioned based on the selected language. The default install behaviour will provide both English and French languages which are determine by the locale settings of the client operating system. ECS only

User Voice Selection (French)

The UC Server system includes a new mechanism for supporting English or French languages based on the user voice selection settings. This feature allows both system and individual users the ability to manage the TUI languages provided to the end call recipient along with UC services including user greetings and both PBA (Personal Business Attendant) and Attendant settings. ECS only

Dial by Name Extended ASCII for French Language

The latest French Language feature enhancement now includes the ability of using Extended ASCII characters such as vowels and accents (as supported for French Language only) throughout the product and for particular use in AD (Active Directory) integrations and lookups, Elements Services such a Dial by Name and ODBC/User Defined database type integrations. ECS only

Called Party Name Display

This enhancement provides the use of the original callers "called" party name during a call that involves point to point call and transfer conditions in order to retain the Called Party display name on the original caller's handset display. The following is a use case scenario of this feature: During a call transaction where one party (A) calls another party (B) and the call is answered, it is now expected that party A will see the name and number of B via their phone display. This is now supported in this latest release for Polycom phone types only. ECS BCS

SIP Stack Upgrade

This enhancement leverages the use of a more recent and reliable SIP stack (version 1.8) in the UC product. This will prevent known issues such as SUBSCRIBE storms related to SIP registrations when used in UC Server through various supporting products including softphone, Paging Server and PCE/LA feature implementations. ECS only

Software fixes included in release 5.3.x since 5.2.x

Tracking #	Summary
UCS-1425	If license includes secondary machine ID for BC - Live Attendant connection fails
UCS-1398	Configured Polycom speed dial entry sets default ring as "Silent" and can only be picked up with "answer" button.
UCS-1381	sample UCNSAppointmentReminder service problematic. TTS elements executes and says <rate absspeed=...)
UCS-1370	Phone dialog no longer allows you to remove all identities (OK button remains disabled)
UCS-1322	Unable to leave voicemail for 7100 user (should have receive voicemail prompt but getting PIN prompt). Diversion reason empty?
UCS-1296	Validation should be done on Job Definitions before loading jobs, to ensure that Jobs with invalid Job Definition Parameters are not loaded.
UCS-1291	QoS settings not specified by the allphones.cfg file
UCS-1274	Immediate SIP re-INVITEs & REFERs are failed to be sent if ACK to 200 OK does not arrive quickly
UCS-1244	Verify Password service element references a mailbox regardless of settings
UCS-1230	Filter field lists do not get updated in the Data element even on refreshing the service (or even after re-adding the element)
UCS-1227	SCW completes the change service account operation but the services fail to stop to apply the change (ie. App & UCNS services
UCS-1214	Polycom phones not autodiscovering
UCS-1213	ADTRAN phone (v1.3.13) autodetecting but not populating the MAC address correctly in the Phone page (plus a refresh issue)
UCS-1208	Crashed ucCompanion desktopclient when conversation participant left (FATAL Unhandled Exception Occurred: System.NullReferenceException)
UCS-1204	ucCompanion disconnected and unable to login (ObjectDisposedException) if hit backspace after group highlighted (or created)
UCS-1193	TTS sample rate is not saved when server is restarted
UCS-1192	Nuance optimized engine cannot be added or selected in UC
UCS-1180	Phone dialog should not allow you to configure all buttons as blfs (phone+expansion)
UCS-1162	On failed fax transmission, .dat files remained in the MessageQueue. (Admin log reports "Failed to send message. The request failed schema validation, EmailAddress' element is invalid)
UCS-1141	allphones.cfg config file unexpectedly references SPIP430 in the bitmap.idleDisplay.name (430 has its own .cfg file)

Tracking #	Summary
UCS-1091	UCNS fails to execute 1st job item after UCS Application Server startup (Server request failed: InvalidServiceSpecification, Application server operation failed: InvalidServiceSpecification)
UCS-1076	timeoutexception (crash ucnsclient.exe) when trying to cancel "Running" job with invalid SMTP address set
UCS-1074	Admin help topic on "Use AD for messaging configuration" missing.
UCS-1067	UC Notification Server Client status indicator lights no longer change colour to show status
UCS-1065	Database must be modified to allow read/access from XLS/CSV files for UCNS
UCS-1061	Suggest install/upgrade should automatically set "AdHocRemoteQueriesEnabled" setting to True in the Surface Area Configuration facet
UCS-1031	ucnslog.txt rotates but renames the .txt extension instead of the file name (eg. to ucnslog.txt.1)
UCS-981	caserver restart (Error report created) on tui mailbox access when CAS in array disconnecting/reconnecting
UCS-979	Right click "Assign to phone" operation assigns the identity to the phone but an error is reported aftewards when you open the Phone dialog later (complaining that the description field is empty)
UCS-977	message length in voice form (and in body of voice mail) appears with time unit "ss" instead of "s"
UCS-965	Command failure when try to set new settings on server (MExchangeManager::SetDataObject) when trying to correct Exchange version (where the status is "Connected.Warning that version does not match")
UCS-964	Voice message that is less than 1 second in length still being delivered unexpectedly - Message length reported as "unknowns" and playback of message incorrectly reports call is from unknown number
UCS-757	UI for Select Messaging Servers unexpectedly allows enabling both Exchange server check boxes and also incorrectly reports total number of servers detected
UCS-697	Help topics - Help button fails to launch help for Gateways (in admin client and SCW) and F1 fails to launch help topic for Distribution Lists
UCS-665	In a Refresh INVITE to 7100, UC receives a 200 with SDP but responds to the 7100 with an ACK without SDP. The call drops.
UCS-629	LogOnService Exception when attempting to login to user that has no owned profile (and more than 1 accessed profile)
UCS-581	Failing to report the number of matches in dial by name (TUI) - error preparing sats for number
UCS-513	Deadlock triggered by update authentication operation
UCS-347	No ringback when CTD in ucCompanion where source identity is on an ADTRAN phone

Note that all fixes from previous 5.x releases up to and including 5.2.x will also be included in release 5.3. Please consult the specific 5.x release notes for details on issues resolved in those releases.

2.1.1   Upgrade Requirements

Prior to upgrading an existing NetVanta UC Server system, be sure that the hardware platform and operating system software meet the minimum requirements; otherwise, you will not be able to upgrade the software. Ensure that both client and server requirements are met. Refer to Section System Requirement 3.2 for information.

CAUTION: Failure to preserve installed software release media properly could result in the inability to rebuild a failed server at a later date. Copies of noncurrent software versions might not be readily available from ADTRAN Technical Support or your reseller causing delays to support technicians rebuilding failed servers.

2.1.2   Client Upgrade Actions

Client software MUST be upgraded for all users of the NetVanta UC Server system. More information on client deployment techniques, including automated deployment can be found in Section 4.3, *Installing or Upgrading NetVanta UC Client Software*.

2.1.3   Other Upgrade Actions

If the administrator has customized any of the system audio files (`Data\System\CustomAnnouncements`) and not placed them in the custom announcements folder `Data\System\CustomAnnouncements\English (U.S.) Male`, then the customized files MUST be copied from CustomAnnouncements.Backup folder.

CAUTION: Failure to copy or backup customized audio files will cause them to be overwritten during the upgrade. Only audio file from this location (`Data\System\CustomAnnouncements`) will be automatically copied to CustomAnnouncements.Backup during upgrades.

For upgrades of the ECS and BAS products, scripts MUST be run before and after upgrading to properly upgrade phone configuration files. Any customizations to phone configuration files must be manually re-applied using the information and backups made by the scripts. Refer to Section 4.2.2, *Upgrading NetVanta UC Server from 4.6.x and 5.0.x* Release, for more information on this procedure.

CAUTION: The SQL database instance for NetVanta UC Server **MUST** be backed up to ensure proper recovery of failed systems. For instructions on backup and restore procedures, refer to the *Planning and Deployment Guide,* available online at https://supportforums.adtran.com. Please adjust backup procedures accordingly. Failure to do so could result in data loss or extended system outages in the case of hardware or software failures.

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3 Installation Requirements

This section describes the environmental prerequisites required for the correct operation of NetVanta UC Server, including operating systems, server/client platforms, messaging servers, and mail clients. In addition, it describes any steps required prior to installing NetVanta UC Server software, including obtaining the license key.

3.1 Preserving Installation and Upgrade Media

If physical installation media (a CD or DVD) was received, please store this media in a safe place so that the software can be reinstalled at a later date if necessary (for example, in the event of a hardware failure).

If the software was downloaded, please ensure that a separate copy of the installation media is made to CD or DVD and this media is stored in a safe place so that the software can be reinstalled at a later date if necessary (for example, in the event of a hardware failure). Do not store the downloaded media on the same physical disks as the operational server as a single disk failure could cause this media to be permanently lost.

Ensure that if software upgrades are performed, new versions are also stored on separate media in a safe place. Support personal could require a copy of the installation media to reinstall software at a later date.

> **CAUTION:** Failure to preserve installed software release media properly could result in the inability to rebuild a failed server at a later date. Copies of noncurrent software versions might not be readily available from ADTRAN Technical Support or your reseller causing delays to support technicians rebuilding failed servers.

3.2 System Requirements

3.2.1 Server Components

This section describes the required operating systems, hardware requirements, and third-party integration platforms for the NetVanta UC Server server components. This applies to both upgrades and new installations. If existing server hardware does not meet these requirements, it must be upgraded or migrated to new hardware prior to upgrading to this release of NetVanta UC Server.

3.2.1.1 Operating Systems
The NetVanta UC Server server components support the following Operating Systems:

Microsoft® Windows™

- Microsoft Windows Server 2008 R2 (x64)
    - o Foundation, Standard, Enterprise, and Data Center editions are supported.
    - o Deployment on Server Core or Hyper-V is not supported.

- Microsoft Windows Small Business Server 2008 (x64)

    The recommended deployment for optimal performance and reliability is to install NetVanta UC Server on the additional Windows Server 2008 license that is part of the Premium Edition of Windows Small Business Server 2008. NetVanta UC Server can also be installed on the Windows Small Business Server 2008 platform with suitable hardware. Refer to Section 3.2.1.3, *Hardware Requirements*, for more information.

- Microsoft Windows Server 2008 (x86, x64)
    - o Foundation, Standard, Enterprise, and Data Center editions are supported.
    - o Deployment on Server Core or Hyper-V is not supported.

- Microsoft Windows Server 2003 R2 SP1, SP2 (x86)
- Microsoft Windows Server 2003 SP1, SP2 (x86)
- Microsoft Windows Small Business Server 2003 SP1 (x86)

VMware vSphere™

- VMware vSphere 4.1
- VMware vSphere 5.0

3.2.1.2   Deprecated Operating Systems (no longer supported as of 5.0.x)
- Microsoft Windows XP SP2, SP3 (Professional) (x86)
- Microsoft Windows Essential Business Server 2008 (x86, x64)
- Microsoft Windows Small Business Server 2011 (x86, x64)

Other software platforms are not supported.

Installation of the server components into other virtualization environments (Virtual Server, Hyper-V, Virtual PC, Virtual Box, etc.) is not supported in production deployments. Due to the real-time nature of telecommunications, audio problems may be experienced in these environments. ADTRAN recommends using server operating system only for all installations of NetVanta UC Server.

> **CAUTION:** When using TAPI integrations, or other integrations requiring use of CTI drivers, please review driver documentation for those products BEFORE proceeding with plans to use Windows Server 2008 or Windows Server 2008 derived platforms (SBS 2008/2010) as the server platform for those deployments.

3.2.1.3   Hardware Requirements
To install NetVanta UC Server, the server hardware platform must meet the minimum requirements in the following table. The minimum requirements are for a minimal installation. The recommended requirements are a guideline for more robust, reliable, and future-proofed systems.

Product engineering guidelines and recommendations should be consulted and followed for anything other than a minimal installation (for example, installations with more than 25 users). Sizing of the server hardware is dependent on the number of users, the traffic levels, and application services used. Selection of hardware should also take into account such things as redundant power supplies, uninterruptable power supplies (UPSs), and redundant disk arrays (for example, RAID) so that the end users' needs and expectations are met, along with any future growth requirements.

Consult *TN102 - Hardware Platform Recommendations* and the *Planning and Deployment Guide*, available online at https://supportforums.adtran.com, for more information on correctly selecting the hardware.

Hardware Component	Minimum	Recommended
Processor	Intel Pentium Dual-Core (E2140)	Intel Xeon Quad-Core (E5310)
RAM	4 GB 4 GB on Windows Small Business Server 2003 6 GB on Windows Small Business Server 2008	4 GB 6 GB on Windows Small Business Server 2008

Hardware Component	Minimum	Recommended
Disk space	80 GB (usable space) 7200 RPM	146 GB (usable space) SAS – RAID 1 or RAID 5

3.2.2 Mail/Messaging Servers for Unified Messaging

NetVanta UC Server supports the following email servers for Unified Messaging:

- Microsoft Exchange™ Server 2000, 2003 SP1 (requires service pack 1 or later), 2007**, 2010, SP1/Sp2 **

> **WARNING:** ** Changes in the Exchange Mailbox detection logic for connecting to Microsoft Exchange Server 2010 or 2007 when the Exchange Mailbox, Client Access, and Hub Transport do not reside on the same server may require disconnecting and re-connecting the mailbox to ensure proper connectivity to the server in this configuration after an upgrade.

- IBM® Domino™ Server 6.0.x, 6.5.x, 7.0, 8.0 (via IMAP)
- Google Mail (via IMAP using stunnel)
- University of Washington IMAPd
- Any 100 percent compliant IMAP4rev1 (RFC 3501) message store (different servers could require different query optimization techniques – consult product documentation for query optimization technique determination procedures)

Integration with Microsoft Exchange Server requires a MAPI connector to be installed on the NetVanta UC Server platform. The supported MAPI connectors, of which only one should be installed on the server platform, are the following:

- Microsoft Exchange Server MAPI Client and Collaboration Data Objects 1.2.1

  (Version: equal or greater than 6.5.8165.0, 2010-Apr-28 – older versions are not compatible with all platforms).This is available for download free of charge from:

  http://www.microsoft.com/downloads/details.aspx?familyid=e17e7f31-079a-43a9-bff2-0a110307611e&displaylang=en

- Microsoft Outlook™ 2003 SP3 only

> **CAUTION:** Microsoft Outlook 2003 as a MAPI connector is not supported and will cause unreliable integration with Microsoft Exchange Server 2010 and could cause system outages.

- Microsoft Outlook 2007 SP1 only

> **CAUTION:** Outlook 2007 SP2 is not compatible as a server MAPI connector with UC Server and installing it will cause NetVanta UC Server to be unable to connect to Exchange Server.

- **All Microsoft Exchange 2010 integrations are only supported with MAPI Client and Collaboration Data Objects 1.2.1**

> **CAUTION:** Outlook 2010 is not compatible as a server MAPI connector with UC Server and installing it will cause NetVanta UC Server to be unable to connect to Exchange Server.

ADTRAN recommends using Microsoft Exchange Server MAPI Client and Collaboration Data Objects 1.2.1 instead of Microsoft Outlook and strongly encourages all customers to switch to this MAPI connector instead of Outlook. The benefits of doing this are as follows:

- No Outlook license is required for the NetVanta UC Server system. The MAPI/CDO package is available at no charge.
- The MAPI/CDO package is a minimal installation that requires fewer Microsoft Updates.
- This component is designed and provided by Microsoft explicitly for the purpose of allowing applications such as NetVanta UC Server to access Exchange Server and does not include many of the client-side nuances of Outlook versions of MAPI.

On Exchange Server 2003, additional steps are required after following the manual integration instructions in Appendix A of the *Configuration Guide*:

Delegate **Exchange View-Only Administrators** control to the NetVanta UC Server service account:

1. Open **Exchange System Manager** on an Exchange Server in the enterprise, or an administrative workstation.
2. Select the enterprise level object (the root object in the tree).
3. Select **Delegate control…** from the **Action** menu. This will open the **Exchange Administration Delegation Wizard**.
4. Click **Next**.
5. In the **Users or Groups** page of the wizard, click **Add** to open the **Delegate Control** dialog box.
6. Select the role **Exchange View Only Administrators** from the list of roles.
7. Click **Browse…** and select the service account used by NetVanta UC Server for Exchange Server and network integration.
8. Click **OK** in the Select **Users, Computers or Groups** dialog box.
9. Click **OK** in the **Delegate Control** dialog box.
10. Click **Next** in the **Users or Groups** page of the **Exchange Administration Delegation Wizard**.
11. Click **Finish** to complete and close the wizard.

3.2.3 Client Components

This section describes the required operating systems and hardware requirements for the NetVanta UC Server client components. Most installations will deploy client software to some or all of the end users of the system. Some installations do not require deployment of the client software depending on how NetVanta UC Server will be used.

3.2.3.1 Operating Systems

The NetVanta UC Server client components (NetVanta UC Client, NetVanta ucCompanion, and NetVanta ucCompanion - Live Attendant) support the following Microsoft® Windows™ Operating Systems:

- Microsoft Windows 7 (Professional, Ultimate, or Enterprise Editions) (x86, x64)
- Microsoft Windows Vista, SP1, SP2 (Business, Ultimate, or Enterprise Editions) (x86, x64)
- Microsoft Windows XP SP2, SP3 (Professional or Tablet PC Editions) (x86)
- Microsoft Windows Server 2008 R2 (x64)
- Microsoft Windows Server 2008 (x86, x64)
- Microsoft Windows Server 2003 R2, SP2 (x86)
- Microsoft Windows Server 2003 SP1, SP2 (x86)

Other software platforms are not supported.

3.2.3.2 Prerequisite Components

Client components now requires a minimum version of <u>Microsoft .NET Framework 4.0</u> to be installed on target systems. In addition, for some components additional Microsoft redistributable components will be installed by the client installer.

3.2.3.3 Hardware Requirements

To install NetVanta UC client, the platform must meet the following minimum requirements for the specified Microsoft Windows operating systems listed below.

Client	XP, Server 2003	Vista, Windows 7, Server 2008, Server 2008 R2
Processor	x86 compatible processor 600 MHz or higher	x86 or x64 compatible processor 1 GHz
RAM	1 GB	1 GB
Free Disk space	500 MB	500 MB
Video	Super VGA (800 x 600) or higher resolution video adapter and monitor	Support for DirectX 9 graphics with: • WDDM Driver • Minimum 128 MB graphics memory • Pixel Shader 2.0 in hardware • 32 bits per pixel

3.2.3.4 Email Clients for Unified Messaging

NetVanta UC Client integrates with the following email clients for Unified Messaging:

- Microsoft Outlook 2002/XP, 2003 SP3, 2007 and 2010 (x86)
- Microsoft Outlook 2010 64 bit without UC voice/fax form client support
- IBM Lotus Notes™ 6.0x, 6.5.x, 7.0, 8.0

3.3 Product Licensing (License Key)

All NetVanta UC Server products must be correctly licensed to operate. The license key obtained from ADTRAN is specific to each installation and defines the exact functionality licensed by the end user for their installation.

3.3.1 New Installs

When installing NetVanta UC Server for the first time, you must obtain a license key to install and activate the software.

3.3.2 Upgrades

To upgrade NetVanta UC Server from a previous major or minor release, you must obtain a new license key **prior to beginning** the upgrade. The existing license key, found in the License Information dialog box in the administrative NetVanta UC Client must be updated to the new license key prior to beginning the upgrade. After the new key is installed, you can continue to upgrade the server software. You do not need a new license key for maintenance (patch or dot) releases.

Upgrade license keys are only available to customers who have an active Software Assurance subscription.

3.3.3 Obtaining a New License Key

To obtain a new or upgrade a license key, fill out a license key request in the UC Tools area of the ADTRAN website (http://www.adtran.com/uctools).

Note: Please allow enough time to obtain the license key – at least one (1) business day should be allocated to ensure the license key is obtained before installation or upgrade.

You will need the following information:

1. Contact information
2. Product Keys
   - New installs: available from materials that shipped with the product.
   - Upgrades: available for a user with Administrator privileges. From NetVanta UC Client, select the Help menu > License Information.
3. Purchase key
   - New installs: available from materials that shipped with the product.
   - Upgrades are available:
     - For a user with Administration privileges: From within NetVanta UC Client, select the Help > License Information. Click **Modify** license.
     - From the Product Licensing Wizard dialog box from Step 1 of NetVanta UC Server Configuration Wizard.
4. Machine ID
   - New installs: available from the Product Licensing Wizard dialog box of Step 1 of the NetVanta UC Server Configuration Wizard.
   - Upgrades are available:
     - For a user with Administration privileges: From NetVanta UC Client, select the Help > License Information. Click **Modify** license.
     - From the Product Licensing Wizard dialog box of Step 1 of NetVanta UC Server Configuration Wizard.
5. Platform specifications (CPU speed, RAM, and server OS) – available from the System control panel in the Windows Control Panel.
6. Product version and edition you will be installing or upgrading – available from the materials shipped with the product.
7. Message store type (Microsoft Exchange Server, Lotus Domino/Notes, IMAP4, or local machine) and version.
8. Legacy PBX interconnection, if applicable: PBX type, firmware version.

3.4 Prerequisite Components

NetVanta UC Server requires that prerequisite components be installed prior to installing the NetVanta UC Server software. The installer will detect which components are missing from the system and prompt accordingly. Some of the prerequisite components are included on the distribution media and can be installed automatically by the installer. However, others must be obtained directly from the vendor. Links to the relevant web-sites for any components that require downloading will be provided by the installer.

Not all prerequisites are required on all operating systems; specifics are noted below. Except where indicated, the prerequisites are installed automatically by the installer. The prerequisite components are:

- **Microsoft .NET Framework 4.0** (download link provided in installer)
- **Windows Server 2008 Enhanced Desktop Feature** (a reboot is required after installation) *[Windows Server 2008-based systems only pre-requisite Microsoft Windows Server 2008 Roles and Features]*

- ***Microsoft Exchange Server MAPI Client and Collaboration Data Objects** 1.2.1 (Version: 6.5.8165.0, 2010-Apr-28 - older versions are not compatible with all platforms
- **Microsoft Visual C++ 2005 SP1 Redistributable Package (x86/x64)**
- **Microsoft Visual C++ 2008 SP1 Redistributable Package (x86/x64)**
- **Microsoft SQL Server 2008 Express Edition**
- **ADTRAN Software Diagnostic Logging Tools**

*MAPI Client and Collaboration Data Objects pre-requisite used for integration with Exchange.

CAUTION: NetVanta UC Server will only work correctly with the version of Microsoft SQL Server that is provided on the distribution media. Other instances of SQL Server cannot be used by NetVanta UC Server.

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4 Installation and Upgrade Instructions

Please review Section 3 *Installation Requirements* before proceeding with this section. It contains important information about product licensing, system requirements, and the versions of required external software components.

> **CAUTION:** Failure to comply with the installation requirements, or properly follow the installation or upgrade instructions will result in an inoperable or poorly performing system.

4.1 New Install of NetVanta UC Server

This section contains an overview of the installation for NetVanta UC Server; for detailed installation procedures consult the *Installation Guide* applicable to your NetVanta Unified Communications product. To facilitate installation and configuration, have the following reference material available during installation:

- *Release Notes* (this document)
- *Planning and Deployment Guide*
- *Installation Guide*
- *NetVanta Unified Communications Server Presence and Control Components Guide* (for use with NetVanta ucCompanion - Live Attendant)
- *Configuration Guide*
- *Administrator Manual*
- *NetVanta ucCompanion Desktop Presence User Guide*

To ensure that all the required information is available during the installation and configuration process, it is recommended that the *Planning and Deployment Guide Worksheet* be completed.

4.1.1 Installing the Server Software

The installation software will automatically verify the prerequisites for software installation. Make sure that you run the installation from a Windows logon that has the ability to install software on the NetVanta UC Server system (for example, Administrator privileges).

To install NetVanta UC Server:

1. If the NetVanta UC Server software was downloaded from the ADTRAN website, follow Step a. If the NetVanta UC Server CD-ROM was shipped to you, go to Step b.
    a. Unzip the contents of the file you downloaded to a temporary folder on NetVanta UC Server (you will need to provide a location and name for the folder). Start the installation by double clicking on **CAAutoRun.exe** (the ADTRAN NetVanta Unified Communications CD Menu will appear).
    b. Insert the NetVanta UC Server CD-ROM. The Auto run application will start, and the ADTRAN NetVanta Unified Communications CD menu will appear.
    Install the applications to the NetVanta UC Server platform by clicking on the **Install Server** button on the installation screen and following the prompts on the subsequent screens.
    a. Ensure that all prerequisites are installed. These will vary depending upon your platform and the components purchased, such as the Presence and Control components and the Windows 2003 Server Administration Tool Pack. The NetVanta UC Server Installation Wizard will ensure that all prerequisite components are installed before proceeding.
    b. After all the prerequisite components are successfully installed, the wizard allows you to install the NetVanta UC Server software.
2. Run the NetVanta UC Server Configuration Wizard, **Configure UC Server**. The NetVanta UC Server Configuration Wizard allows you to specify server properties such as message store, NetVanta UC Server

administrator password, PBX information, and dialing properties. The wizard guides you through the server configuration process. The wizard does most of the configuration tasks automatically, however, site specific information about the network and server needs to be entered at various steps.

3. When installing NetVanta UC Server for the first time, you **must** obtain a **license key**. To obtain a license key, please refer to Section 3.3, *Product Licensing (License Key)*.

4.1.2   Installing the Client Software

In order for NetVanta UC Server users to take full advantage of its functionality, client software should be deployed to their desktop or laptop computers. Refer to Section 4.3, *Installing or Upgrading NetVanta UC Client Software*, for installation options and procedures.

4.2   Upgrading NetVanta UC Server

> **CAUTION:** Backup procedures have changed from previous releases. For instructions on backup and restore procedures, refer to the *Planning and Deployment Guide*, available online at https://supportforums.adtran.com, and adjust backup procedures accordingly. Failure to do so could result in data loss or extended system outages in the case of hardware or software failures.

4.2.1   Upgrade Matrix

The following table describes which versions of NetVanta UC Server can be upgraded to newer versions.

From \ To	5.0.x (NetVanta UC Server)	5.1.x (NetVanta UC Server)	5.2.x (NetVanta UC Server)	5.3.x (NetVanta UC Server)
4.6.x (deprecated) (NetVanta UC Server)	√	Direct upgrade unsupported – upgrade to 5.0.x	Direct upgrade unsupported – upgrade to 5.0.x	Direct upgrade unsupported – upgrade to 5.0.x
5.0.x (NetVanta UC Server)		√	√	√
5.1.x (NetVanta UC Server)			√	√
5.2.x (NetVanta UC Server)				√
5.3.x (NetVanta UC Server)				

In order to upgrade from older versions, interim upgrade steps must be followed. Refer to the applicable section below for more details.

4.2.2   Upgrading NetVanta UC Server from 4.6.x and 5.0.x Releases

> **CAUTION:** The existing version of NetVanta UC Server must NOT be uninstalled prior to upgrading. The installation process requires that the existing implementation be available in order to perform the upgrade correctly.

The following is a summary of the upgrade procedure from any NetVanta UC Server 4.6.x/5.0.x releases; refer to the *Installation Guide* applicable to your NetVanta Unified Communications product, available online at https://supportforums.adtran.com, for detailed instructions on installing this component.

> **CAUTION:** Failure to follow the steps below, exactly as described, could result in a system that does not upgrade or operate correctly after upgrade.

Perform the following steps:

1. If performing a major or minor upgrade, obtain a new license key. Please refer to the instructions in Section 3.3, *Product Licensing (License Key).*
2. Backup the NetVanta UC Server. For instructions on backup and restore procedures, refer to the *Planning and Deployment Guide* applicable to your NetVanta Unified Communications product, available online at https://supportforums.adtran.com. Backing up will preserve the following data:
    a. Users (greetings, services, announcements)
    b. Port configuration
    c. Attendant data
    d. System configuration
    e. Routing data
    f. Telephone data
    g. Gateway data
    h. PBX configuration data

    > **CAUTION:** Failure to backup the data according to these instructions and the Technical Note **will** result in the inability to restore the system to the original configuration should the upgrade process be unsuccessful or aborted. **Always back the system up prior to upgrading.**

3. If a new license key was obtained in Step 1, modify the current license key using the following procedure:
    a. Open NetVanta UC Client using the current installed product version and log in as a user with administrative privileges.
    b. Select **License Information…** under the Help Menu on the main toolbar.
    c. Click the Modify **license…** button to open the Modify License dialog box.
    d. Enter the new license key in the space provided.
    e. Click **OK** to close the Modify License Dialog box.
    f. Click Close to close the License Information Dialog box.
    g. Close NetVanta UC Client by clicking the top right corner x icon or selecting **Close** from the **File** menu.
4. If the NetVanta UC Server software was downloaded from the ADTRAN website, follow Step a. If the NetVanta UC Server CD-ROM was shipped to you, go to Step b.
    a. Unzip the contents of the file you downloaded to a temporary folder on the server computer (you will need to provide a location and name for the folder).
    b. Insert the NetVanta UC Server CD-ROM. The **CAAutoRun** application will start, and the ADTRAN NetVanta Unified Communications CD menu will appear – leave this open for now, you will use it later.

5. For ECS and BAS product variants, run the `Pre-Update.bat` script file as follows:

    a. Click the **Start** menu and select **Run…**
    b. Type `cmd.exe` and click **OK** to open a command prompt window

    > **NOTE:** On systems with User Account Control (UAC) enabled, such as Windows Server 2008 R2, you must start the command prompt window as Administrator. To do this, instead of Step a and Step b above, do the following:
    >
    > 1. Click on the **Start** menu.
    > 2. Type `cmd.exe` in the search bar. (If classic start menu is enabled, locate **Command Prompt** under **All Programs | Accessories** instead.)
    > 3. Right click on `cmd.exe` in search results (or Command Prompt in the menu), and select **Run as administrator**.

4. Accept the UAC prompt to elevate the command prompt to administrative privileges.

c. Navigate to the script folder on the installation media using the `CD` command. This is located in the `Utility\Scripts` subfolder of the installation media.

Example: `CD /d C:\NetVantaUCServerInstallMedia\Utility\Scripts`

d. Run the `Pre-Update.bat` script, supplying any appropriate parameters relevant to your installation:

Syntax: `Pre-Update.bat [/V | /?] [PhoneTypes Folder] [Backup Folder]`

- If your NetVanta UC Server installation is not located at `C:\Program Files\ADTRAN\NetVanta UC Server\`, you must specify the location of the PhoneTypes system data folder as shown in the example below.
- If backups should be written to a location other than `C:\Backup\PhoneTypes`, then you must specify a backup folder as shown in the example below.
- The `/?` option provides help on the script; the `/V` option provides more detailed output and logging.

Example: `Pre-Update.bat "C:\Program Files\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\" "C:\Backup\PhoneTypes\"`

e. When the script prompts you to continue, confirm the information displayed, type **Y**, and then press Enter.

f. Examine the output of the script to ensure it ran correctly. The output is placed in a file called `Pre-Log.txt` in the backup location. The default backup location is `C:\Backup\PhoneTypes`.

g. Leave the command window open because it will be used later.

6. The ADTRAN NetVanta UC Server Application Services service could be unable to be started during the upgrade due expiry of the service account password. This can also occur spontaneously on some Windows XP installations or in networks where account passwords have to be changed regularly, but will not be detected until the machine is restarted or the ADTRAN NetVanta UC Server Application Services service is restarted. Be sure to have the service account password accessible in order to reset it immediately.
To verify that the service account password has not expired, do the following:

a. Open the **Services** administration tool from **Start > Control Panel > Administrative Tools**.

b. Locate the service named ADTRAN NetVanta UC Server Application Services.

c. Right click on the service, and select **Restart** from the context menu.

d. If the service fails to start, right click on the service, and select **Properties** from the content menu.

e. Select the **Log On** tab. Re-enter the service account password in the provided fields and click **OK**.

f. Attempt to start the service again by right clicking on the service, and selecting **Start** from the context menu. If the service again fails to start, verify that the service account is operating correctly and is not locked out.

IMPORTANT NOTICE: Failure to perform this step will cause the install to fail with a 1920 error if there is a problem with the service account or its password. This can be corrected by following the same steps while the 1920 error is displayed. Do not cancel the 1920 error dialog box because it will fail to upgrade and your system will have to be restored from backups. When you have corrected the service account password, click **Retry** in the 1920 error dialog box.

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7. If the NetVanta UC Server software was downloaded from the ADTRAN website, follow Step a. If the NetVanta UC Server CD-ROM was shipped to you, go to Step b.

a. Locate the temporary folder where you extracted the files in a previous step. Start the upgrade by double clicking on **CAAutoRun.exe** (the ADTRAN NetVanta Unified Communications CD Menu will appear).

b. From the ADTRAN NetVanta Unified Communications CD Menu (opened when the CD was inserted in a previous step), click the **Install Server** button to prepare the NetVanta UC Server upgrade.

8. On an upgrade from previous releases, you could be required to install or update prerequisite components. Click on the **Verify or automatically install remaining components** button to proceed. Some components might require downloading from the vendor's websites.

9. Adding the NetVanta UC Server Presence and Control Components:
    a. If you are using the NetVanta Unified Communications Server product variant, or if you do not plan on using NetVanta ucCompanion - Live Attendant:
        - Disable the following option: **Install Presence Components**.
        - Click **Next**.
    b. If you plan on upgrading the Presence and Control Components from a 4.6.x or 5.0.x version you must first uninstall the existing version via Add/Remove control panel applet:
        - Navigate to the install media and locate the **ADTRAN NetVanta ucCompanion.msi** and launch the installer and follow the dialog box.
        - Click Install on the **ADTRAN NetVanta UC Live Attendant Server Components Setup Wizard** screen.
        - Click **Next** on the welcome page of the **ADTRAN NetVanta UC Live Attendant Server Components Setup Wizard** and follow the prompts on subsequent screens until finished. Consult the *NetVanta Unified Communications Server Presence and Control Components Guide* for additional installation documentation.
        - Click **Finish** when complete.
        - Click **Yes** when prompted to restart the system for the configuration changes to take effect.

10. Upgrading the NetVanta UC Server.

    If upgrading 5.x:

    - The ADTRAN **NetVanta Unified Communications Server Setup** welcome page will appear briefly as the upgrade does various checks on the system.
    - Click the **Install** button when the page titled **Resuming the ADTRAN NetVanta Unified** Communications **Server Setup Wizard** appears and follow the prompts to complete the upgrade.
    - Click the **Finish** button to close the setup wizard and return to the **Preparing NetVanta UC Server Installation** dialog box.

11. Click the **Configure UC Server** button to launch the NetVanta UC Server Configuration Wizard.

    NOTE: *If all the steps in the server configuration were completed prior to the upgrade, you will be presented with three options (**Change Service Account**, **Users**, and **Phone Types**). You could be required to perform the first option, **Change Service Account** to reset the service account to what was configured prior to the upgrade.*

12. For ECS and BAS product variants, run the `Post-Update.bat` script file as follows:
    a. Locate the command window opened in Step 0.
    b. Run the `Post-Update.bat` script, supplying any appropriate parameters relevant to your installation:

        Syntax: `Post-Update.bat [/V | /?] [PhoneTypes Folder] [Backup Folder]`

        - If your UC Server installation is not located at `C:\Program Files\ADTRAN\NetVanta UC Server\`, you must specify the location of the PhoneTypes system data folder as shown below in the example.
        - If backups were written to a location other than `C:\Backup\PhoneTypes`, then you must specify the same backup folder as specified in Step 0.
        - The `/?` option provides help on the script; the `/V` option provides more detailed output and logging.

Example: `Post-Update.bat "C:\Program Files\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\" "C:\Backup\PhoneTypes\"`

c. When the script prompts you to continue, confirm the information displayed, type Y, and then press Enter.

d. Examine the output of the script to ensure it ran correctly. The output is placed in a file called `Post-Log.txt` in the backup location, which defaults to `C:\Backup\PhoneTypes`.

e. When the script completes, it will indicate if any site-specific customizations have been made. Details of the customizations will be output to a file called `FileComparison.txt` in the backup location. The default backup location is `C:\Backup\PhoneTypes`.

f. The Post-Update script will only update all of the "attributes.xml" files for each phone type in use. It will not modify any other files automatically. Please re-apply any necessary custom configuration to all other files listed in "FileComparison.txt". For any questions or concerns, please refer to phone vendor documentation or contact ADTRAN support for guidance. Once any customizations have been re-applied, restart the ADTRAN NetVanta UC Server Application Services service using the Services administrative tool.

IMPORTANT NOTICE: For upgrades of ADTRAN phone family types, custom configurations will be lost unless the following changes are made **prior** to running the Pre-Update.bat

- Locate the ADTRAN.original.zip on the release media
- Extract to the following location: `"C:\Program Files\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\ADTRAN`
- Run the Pre-update and Post-update instructions as noted below

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IMPORTANT NOTICE: Since some phone firmware required for supporting new features in this release have changed, the following phone family types including Polycom and snom's existing user customized configuration files (.cfg) will be overwritten during an upgrade and cannot be merged as a result of the post-update script execution as noted above. Custom configuration will require user to edit the new .cfg files after the upgrade and associated phone firmware revision update.

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13. Update the `RestartOverrides.cfg` file (located in ...`\NetVanta UC Server\Data\System\Recovery\`) according to the following conditions:
    a. If manual changes have been made to this file, then you must manually copy any entries from `RestartOverrides.cfg.original` to `RestartOverrides.cfg` that are not present in the latter file.
    b. If no manual changes were made to this file, then replace the contents of `RestartOverrides.cfg` with the contents of `RestartOverrides.cfg.original`. It is not necessary to restart the ADTRAN NetVanta UC Server Application Services service. However, if the file has been appended to instead of being replaced, then the application service must be restarted for the changes to take effect.

14. If **Install Presence Components** was selected in Step 9, you will be required to configure these components at this time. Please consult the *NetVanta Unified Communications Server Presence and Control Components Guide* for configuration documentation. If this is an upgrade from 4.6.x or 5.x, then the NetVanta UC Server Presence and Control Components could have already been configured.

15. For optimal performance, disable the Indexing Service provided by Windows. For detailed instructions, please refer to Section 3.7, *Configuring Services*, of the *Installation Guide*.
16. For ECS and BAS product variants, re-apply phone configurations to all phones in the system as follows:
    a. Open NetVanta UC Client and log in as a user with administrative privileges.
    b. Click on the **Administration** navigation bar.
    c. Click on the **Phones** folder in the **Administration** navigation bar.
    d. In the contents pane, select all phones by clicking on the first phone, then pressing Shift-Ctrl-End on the keyboard. All phones should now be selected.
    e. Right click on one of the selected phones, and select **Reload Configuration** from the menu. This will cause all phone configuration files to be regenerated and phones to reload their configuration data (rebooting most phone types).

To install NetVanta UC Server:

1. **Rename** all of the configuration files in the `.\Data\System` by appending `.old` to the existing filename:

   Example: `C:\Program Files\Objectworld\CallAttendant Office Server\Data\System\DefinityPBXDefinition.cfg` to `DefinityPBXDefinition.cfg.old`

2. If the NetVanta UC Server software was downloaded from the ADTRAN website, follow Step a. If the NetVanta UC Server CD-ROM was shipped to you, go to Step b.
   a. Unzip the contents of the file you downloaded to a temporary folder on the server computer (you will need to provide a location and name for the folder). Start the installation by double clicking on **CAAutoRun.exe** (the ADTRAN NetVanta Unified Communications CD Menu will appear). Preserve a copy of the installation media accordingly. Refer to Section 3.1, *Preserving Installation and Upgrade Media*.
   b. Insert the NetVanta UC Server CD-ROM. The Auto run application will start, and the ADTRAN NetVanta Unified Communications CD menu will appear.
3. If you plan on using NetVanta ucCompanion – Live Attendant, install or update the NetVanta UC Server Presence and Control components at this time. Consult the *NetVanta UC Server Presence and Control Components Guide* for installation documentation, which is provided on the distribution media.
4. Install the server applications to the NetVanta UC Server platform by clicking on the **Install UC Server** buttons on the NetVanta UC Server installation screen and following the prompts on the subsequent screens until finished.
5. For optimal performance, disable the Indexing Service provided by Windows. For detailed instructions, please refer to Section 3.7, *Configuring Services*, of the *Installation Guide*.
6. Once the installation has completed, select the **Configure UC Server** button to run the **Server Configuration Wizard**, but do not add anything if it has already been configured. From the set of options, at a minimum, complete the following tasks:
   a. Enter the NetVanta UC Server license key to enable SIP functionality.
   b. Configure the **Windows Network Integration** and select from one of the following:
      i. If the service account was previously configured for **Local System** account, you must create a Windows account on the local machine. Operating the **Application Services** service on the **Local System** account is no longer supported.
      ii. If the service account was previously configured with a Windows Active Directory™ account, then configure the **Existing Service Account**.
7. Open the **Windows** Services **application** and ensure that the **ADTRAN NetVanta UC Server Application Services** service is set to start automatically. Note, you might have to refresh (F5) the services application in order to get a current view of the status. From the **Windows Services Applications**, start the **ADTRAN NetVanta UC Server Application Services** service if it is not already started.

8. Complete the remaining steps in the **NetVanta UC Server Configuration Wizard**. If appropriate, make any additional configuration changes required, such as adding NetVanta Enterprise Communications Server as a new communication system, adding new phone types or new gateways.

4.2.3 Upgrading Client Software

If anything other than a minor server upgrade has taken place, client software **must** be updated on end user computers; only 5.1.x client software is supported with 5.1.x server software. Refer to Section 4.3, *Installing or Upgrading NetVanta UC Client Software*, for installation options and procedures.

4.3 Installing or Upgrading NetVanta UC Client Software

This section documents manual installation procedures, and presents other techniques for automated client deployment.

CAUTION: Only release 5.3.x NetVanta UC Client software is compatible with NetVanta UC Server 5.3.x software (the patch revision value 'x' does not need to be identical). All incompatible clients must be upgraded after the NetVanta UC Server has been upgraded.

4.3.1 Manual Installation or Upgrade Instructions

NOTE: *The user installing NetVanta UC Client software MUST have administrative privileges on that desktop computer.*

1. If the NetVanta UC Server software was downloaded from the ADTRAN website, follow Step a. If the NetVanta UC Server CD-ROM was shipped to you, go to Step b.
   a. Unzip the contents of the file you downloaded to a temporary folder on the desktop computer (you will need to provide a location and name for the folder). Start the installation by double clicking on **CAAutoRun.exe** (the ADTRAN NetVanta Unified Communications CD Menu will appear). Preserve a copy of the installation media accordingly. Refer to Section 3.1, *Preserving Installation and Upgrade Media*.
   b. Insert the NetVanta UC Server CD-ROM. The Auto run application will start, and the ADTRAN NetVanta Unified Communications CD menu will appear.
2. Install the client applications to the client computer by clicking on the **Install Client** button on the installation screen and following the prompts on the subsequent screens.

CAUTION: Installing NetVanta UC Client directly on the NetVanta UC Server platform is not supported. Ensure that the client is installed on a separate platform meeting the minimum requirements.

4.3.2 Other Techniques for Installing and Upgrading Client Software

Client software can be deployed using automated techniques including:

- GPO-based MSI installation. Refer to *TN116 - Installing NetVanta UC Client Using GPO*, available online at https://supportforums.adtran.com, for more information on this option.
- GPO-based login scripts that invoke either `SETUP.EXE` or `MSIEXEC.EXE` with appropriate parameters. Prerequisite components must have been previously installed successfully. Consult standard Microsoft documentation for more information on those techniques.

5   Support, Documentation, and Training

5.1   Support

Self-service support material can be obtained from the ADTRAN website, http://www.adtran.com/support, and from the ADTRAN Technical Support Knowledge Base, https://supportforums.adtran.com.

Information on product support services can be obtained from the ADTRAN website:
http://www.adtran.com/support.

5.2   Documentation

Product documentation and additional technical support material can be found on the ADTRAN website, http://www.adtran.com/support, and in the ADTRAN Technical Support Knowledge Base, https://supportforums.adtran.com.

5.3   Training

Information on current training programs and certifications can be found on the ADTRAN website:
http://www.adtran.com/training.

5.4   Product Downloads and Third-Party Drivers

Product downloads and third-party drivers and patches are available in the support area of the ADTRAN website:
http://www.adtran.com/support.

6 Third-Party Interoperability

> **CAUTION:** Some third-party drivers and applications may not support Windows Server 2008 and derived platforms (SBS 2008, 2010). When using TAPI integrations, or other integrations requiring the use of CTI drivers, please review driver documentation for those products BEFORE proceeding with plans to use Windows Server 2008 as the server platform for those deployments.

Please consult information provided in *TN051 – UC Server Interoperable SIP Devices and Services*, available online at https://supportforums.adtran.com, for interoperability information related to:
- SIP telephone terminals
- SIP soft phones
- SIP paging speakers, amplifiers and related devices
- SIP wireless terminals
- SIP gateways and application layer gateways (ALGs)
- ITSPs

Information on PBX integration and software applications is provided below in this document.

6.1 NetVanta UC Server with a PBX Integration

6.1.1 Supported Private Branch Exchanges (PBX)

NetVanta Unified Communications Server has the capability to connect to multiple traditional PBXs and IP PBXs while simultaneously supporting SIP services ECS. NetVanta UC Server can be deployed as a voicemail, unified message server, database IVR platform, and fax server behind a traditional PBX while also simultaneously supporting SIP telephony ECS. This provides a useful transition strategy for companies looking to migrate to VoIP but who still want to leverage their existing infrastructure. NetVanta UC Server users who employ a traditional PBX for telephony can still take advantage of Active Directory™ integration for user management; the telephony features will be managed through their PBX configuration interface.

NetVanta UC Server integrates with a wide variety of traditional PBX and IP PBXs using Dialogic 1000 and 2000 Media Gateways. The following PBXs are now supported using the Dialogic Media Gateway:

• Alcatel Omni PCX 4400	• Nortel CS-1000
• Avaya Communications Manager	• Nortel DMS 10
• Avaya Definity G3	• Nortel DMS 100
• Avaya Legend	• Nortel Meridian 1
• Avaya Merlin Magix	• Phillips Sopho
• Avaya Partner	• Rolm (Siemens) 8000
• Ericsson BusinessPhone	• Rolm (Siemens) 9000
• Ericsson MD110	• Rolm (Siemens) 9751
• Intecom PointSpan M6880	• Siemens HiCom 150E
• Mitel 3300	• Siemens HiCom 300
• Mitel SX-2000	• Siemens HiPath 4000
• Mitel SX-200D Family	• Toshiba CTX
• NEC NEAX2400	

For more specific details on which PBX editions and interfaces are supported, consult the Dialogic Media Gateway documentation available from Dialogic's website: http://www.dialogic.com/support/helpweb/mg/integration.htm.

NetVanta UC Server also integrates with the PBXs listed in the table below using one of the following techniques:

- Analog port integration with in-band tones using Dialogic® D/4PCIUF and D/120JST-LS Media Boards
- Digital set emulation using Dialogic® D/82JCT-U and D/42JCT-U PBX Integration Boards
- CTI link/analog port integration using Dialogic® D/4PCIUF and D/120JST-LS Media Boards
- PBX Vendor supplied Microsoft TAPI/WAVE Service Providers

PBX Vendor/Model	Minimum Software Release	Technical Note (TN) Reference Number	Integration Type	Third-Party Hardware/Software (Recommended)
Avaya Communications Manager	1.0 and above	TN016	Digital set emulation: - 7434D emulation - 8434D emulation - 7434ND emulation	Dialogic 6.0 SU 266
Avaya Definity (no CLID)	6.3 and above	TN009	Analog port using mode codes; mode code option is required	Dialogic 6.0 SU 266
Avaya Definity/Multi-Vantage (with CLID)	4.0 and above	TN010	Digital set emulation: - 7434D emulation - 8434D emulation - 7434ND (7.5 and above)	Dialogic 6.0 SU 266
Avaya IP Office	2.0 and above	TN012	CTI link/analog port using TAPI	- IP 400 CTI link - IP 400 TAPI-WAVE Dialogic 6.0 SU 229
Avaya Merlin Legend	3.1 and above		Analog port using mode codes	Dialogic 6.0 SU 229
Avaya Merlin Magix (with CLID)	2.1 and above	TN008	Analog port using mode codes	Magix CTI link bundle Dialogic 6.0 SU 229
Avaya Merlin Magix (no CLID)	2.1 and above	TN008	CTI link/analog port using mode codes /TSAPI	Dialogic 6.0 SU 229
Avaya Partner ACS	3.0 and above		Analog port using mode codes	Dialogic 6.0 SU 229
Cisco Call Manager	4.2	TN039	Cisco-supplied Microsoft TAPI/WAVE Service Provider	
Mitel SX200 (family)	G1005/LW16 F41.0.2	TN011	Analog port using enhanced in-band DTMF tones	Dialogic 6.0 SU 229

PBX Vendor/Model	Minimum Software Release	Technical Note (TN) Reference Number	Integration Type	Third-Party Hardware/Software (Recommended)
Mitel 3300 (IVR only)	Any version that requires ONS voicemail support		Analog port using in-band DTMF tones	Dialogic 6.0 SU 229
Nortel Norstar	4.2 and above	TN003	Digital set emulation: - M7324 set emulation	Dialogic 5.1.1 with PTR.31016 **
Generic in-band	PBX dependent		Analog port using in-band DTMF tones	Dialogic 6.0 SU 229

** NetVanta UC Server ONLY supports Dialogic Release 5.1.1 software with PTR.31016 (LIBFAXMT.DLL) for Norstar PBXs since the Do Not Disturb feature does not work with Dialogic Release 6.0 for Nortel Norstar PBX.

6.1.2   New Installation of Dialogic Software

To install Dialogic software on the new NetVanta UC Server:

1. Install the Dialogic System Software compatible with the PBX make and model.
   a. Run SETUP.EXE from Windows Explorer.
      i. When prompted to select features, select **Core Runtime Package**, select **Next**.
      ii. When advised that the installation will install third-party software, select **Yes**. The installation will detect and remove any existing Dialogic system software.
      iii. The first stage of the installation will require a reboot. When prompted to restart the system, select **Yes**.
2. Verify through the Windows Hardware Device Manager that all of the Dialogic cards reside in the Dialogic Springware Devices section.

   NOTE: *If any of your cards appear to be improperly configured (for example, caution symbol or otherwise) then you will have to update the driver.*

   a. To update the driver:
      i. Locate and configure the Dialogic card from Device Manager.
      ii. Select the **Driver** tab and select **Update Driver**.
      iii. Choose **Search for suitable driver for my device (recommended),** and click **Next**.
      iv. When the driver update locates the Dialogic Card, click **Next**.
   b. Repeat Step i through Step iv for each Dialogic card that appears improperly installed or configured.
3. Run **Dialogic Configuration Manager** (Start > Programs > Dialogic System Release > Configuration Manager – DCM. DCM will detect any Dialogic hardware installed on the machine hosting NetVanta UC Server software.
   a. Ensure that the board settings match your PBX type. (The default configuration is Nortel Norstar.)
   b. For digital set emulation, open each card and ensure the **MISC** tab > **PBXSwitch** parameter is configured according to your integration.
   c. Refer to the relevant configuration guide
4. Configure the Dialogic service to start automatically; Select Settings > System Device Autostart to **Start System**. It is normal to encounter the error message **Failed to set the Device Autostart setting. Requested data not found in NCM data storage**.
5. Proceed with NetVanta UC Server installation instructions.

6. Verify the Dialogic board ordering by running NetVanta UC Client as an administrator and call each port. If the ports are not answering in the correct order, switch the Dialogic cables on the back of the machine hosting NetVanta UC Server software.

6.1.3 To upgrade Dialogic software on existing NetVanta UC Server (if required)

Once you have determined that the Dialogic software version needs to be upgraded then perform the following steps:

1. Remove existing Dialogic system software.
   a. Stop the existing NetVanta UC Server and Dialogic services.
   b. Launch the Microsoft Windows Service control application (Start > Settings > Control Panel > Administrative Tools > Services).
      i. **Stop** the service labeled **ADTRAN NetVanta UC Server Application Services** and change the service **Startup type** from Automatic to Manual.
      ii. **Stop** the service labeled **Dialogic System Service**.
   c. Remove the Dialogic System Software.
      i. Locate the Add/Remove Programs from the Windows Control Panel (Start > Settings > Control Panel > Add/Remove Programs).
      ii. **Select** and **Remove** the Dialogic software.
   d. Reboot the system as indicated.
2. In rare instances, you might need to run a Dialogic utility to clean up the old Dialogic Release 5.1.1 installation files, directories, and registry settings. This batch file can be located in `\cleanup\dlgc_rel_clean.bat` in the Dialogic installation directory. This will be apparent if the Dialogic DCM – configuration management application is not installed.
3. Install the Dialogic System Software.
   a. Follow the procedure in the previous section (*New Installation of Dialogic Software*) to install the required version of Dialogic applicable to your PBX.
4. Launch the Microsoft Windows Service control application (Start > Settings > Control Panel > Administrative Tools > Services).
   a. Set the **Startup type** to Automatic for the service labeled **ADTRAN NetVanta UC Server Application Services**.

6.2 Software Product Interoperability

The following other software products have been tested and are known to work with NetVanta UC Server:

Vendor	Interoperability Level	Product/Service	Software Version
Research In Motion (RIM)	Interoperable	BlackBerry Enterprise Server for Microsoft Exchange	4.1 or newer
		BlackBerry Handheld Devices	4.2.1 rev 163, 4.2.2 or newer
PhoneTag	Interoperable	PhoneTag (formerly SimulScribe)	n/a
Google	Interoperable	Google Mail (Gmail) using stunnel (SSL proxy)	n/a stunnel 4.24 or newer

7 Known Software Limitations

The following limitations are known in this NetVanta UC Server release:

Tracking #	ISSUE	Workaround
UCS-710	Windows Updates should be applied only during a maintenance window	As noted
UCS-1181	Where the phone is configured with multiple identical BLF's, all appear on the phone but only one will be used for monitoring	None
UCS-1183	Deadlock generated when delete 2 or more users from the Users	None – very intermittent
UCS-1207	Conversation menu (in ucCompanion) not visible if you modify windows advanced appearance settings	None
UCS-1215	Duplication of announcement fails with reason 17 Admin is only given the reason "Failing to store data on server"	None
UCS-1231	User Data Editor unexpectedly reporting serious error when you close the dialog	Logging error only
UCS-1257	Business Continuity not supported with UCNS	None – as designed
UCS-1283	To or the From info does not display correctly on the phone for some French characters	Limited to minor chars such as : œ
UCS-1286	Phones wizard, while in Secondary server role, indicates permission denied but phone is enabled anyway	Limited restriction on Secondary only – none functionality affecting
UCS-1289	BC configuration vbsBackupLocation assumes "C:\" drive	None – as designed
UCS-1300	BC Advanced SMTP Security Settings saved to file in the clear	None
UCS-1301	BC configuration scheduled for time 00:00 does not synchronize	Limited to this timeframe only
UCS-1303	Editing user on the secondary server results in 6 permission denied error (should only need one)	Do not modify settings on secondary server
UCS-1304	In a BC configuration, the error "Permission denied" should indicate that the server is running as secondary server.	Do not modify settings on secondary server
UCS-1305	In BC configuration, the call drops when you press 1 to keep the PIN	Modify PIN after restoring Primary
UCS-1307	In a BC configuration, the admin on the secondary server unexpectedly has permissions to add/modify routing and Options	Do not modify settings on secondary server
UCS-1319	The admin client audit logs should indicate when a synchronization has occurred	Not implemented

Tracking #	ISSUE	Workaround
UCS-1321	When a registered IP phone is configured with 2 Identities - Park feature does not function.	Limit identities on Handset with Park buttons or do not direct Park the call
UCS-1323	BC Secondary server PIN change operation indicates an unexpected server error	Incorrect error status only
UCS-1330	Service expiry date appearing invalid when applying the 5.3.0 BC key generated license	Display information does not account for dual Machine ID licensing in support of BC
UCS-1331	DR upgrade to BC, the configured settings do not get populated in the BC Server object	Reset settings once upgrade to BC is complete
UCS-1332	Admin client does not accept new license key that includes the secondary machine id on upgrade	Contact http://www.adtran.com/support for proper license distribution in support of DR to BC upgrades
UCS-1341	BC server configuration - when primary is down, attempts to login to client/GUIs using secondary as server should provide warning	Incorrect error status only
UCS-1351	Get-UCPhone command in UC Server Management shell does not list the phones CoS	None – not implemented
UCS-1362	Park button on ADTRAN IP often fails to park the call	None
UCS-1366	Identities containing extended characters, display incorrect From info in the subject and Caller Id name for upgrades only	Modify the Default.cfg and include entry: [UTF8] CallInfoInUTF8 = 1
UCS-1393	Use of STG voices via TTS enabled service elements previously using SAPI tags will need updates to use STG_TTS VTML tags	Refer to STG_TTS_VTML_Guide.pdf for updates
UCS-1399	The default code for HFAA does not work on AdtranIP700 phone v. 2.3.0 on ECS	Change default HFAA ** routing entry to another value e.g. *1, *+
UCS-1406	Defaults button in Options-Voices dialog sets STG TTS sample rate to wrong default	Change the settings manually
UCS-1407	With the Stateful and Outbound Proxy configuration BLF and Park key buttons are not working	BLF in Proxy configuration working in limited mode, Park is not supported at this time
UCS-1411	Park zone buttons configured on phones, behind stateful proxy, are not supported	As noted
UCS-1412	Business Continuity Limitations	Refer to https://supportforums.adtran.com/docs/DOC-5855 for known limitations
For more information on other "Known software limitations" please refer to the associated release notes for the specific release (e.g. 5.0.x/5.1.x releases)		