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ShoreTel is now part of Mitel. Together, we look forward to helping you power connections that are brilliantly simple.

The Small Business Edition System (SBE) is designed to give small business owners productivity enhancing US application with brilliantly simple management and low total cost of ownership. This down scaled version of the Unified Communication Solution is designed for companies and organizations needing no more than 100 phone extensions but still in need of a versatile and feature-rich IP phone system. SBE fits right in with existing IP networks and works seamlessly with business applications and processes.

The SBE system is uses either the UC 30 Server or the UC 75 Server. Refer to the following sections for information about installing and initially configuring the UC30/UC75 server as the Headquarters server for a SBE system.

The UC30 server is designed to support a single application such as headquarters (HQ) or DVS. The server is shipped with Microsoft Windows 2016 OS Enterprise Telecommunications pre-installed. By default, the server is configured to use DHCP and broadcasts the NETBIOS name "shoretel".

The UC75 server is designed to support multiple Connect applications in a virtualized setup. It is shipped with Microsoft Windows 2016 Enterprise Telecommunications on a thumb drive. The license key is included the Microsoft Windows Server 2016 COA (Certificate of Authenticity) license sticker attached to the server.

In this document, UC30/UC75 server is referred to as server from this point forward.



#### **Note**

The administrator must assign a static IP address to the server prior to installing Connect. Record and store the IP address securely.

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## **Windows Server Considerations**

The UC30 server is shipped with the Windows Server 2016 Operating System pre-installed and a generic license key applied. The official license key is provided on the Microsoft Windows Server 2016 COA (Certificate of Authenticity) license sticker attached to the server, and the generic license key must be replaced with the official license key. By default, the server is configured to load Windows updates, prompting for acceptance before reboot. Administrators should use typical Windows update and security procedures with the server.

**Note**

Microsoft Server 2016 and Mitel End-user License Agreements (EULA) are available in the UC30 Sever Documentation article on the Mitel support site. By using the UC30 server, you automatically accept and agree to the terms and conditions of EULA.

The UC75 server is shipped with the Windows license key provided on the Microsoft Windows Server 2016 COA (Certificate of Authenticity) license sticker attached to the server. Refer to [Install and Configure the Operating System](#) on page 5 for more information.

Microsoft Server 2016 and Mitel End-user License Agreements (EULA) are available on the thumb drive shipped with your UC75. These files are located in the EULA directory:

- Microsoft Windows Server(R) 2016 Software License Terms — EULAWinSrvr2016\_EmbSysTmsTlcoFnICln.pdf
- Microsoft Windows Server(R) 2016 Customer License Agreement — OEM Embedded CLA 6 0.pdf
- Additional license terms for "Windows Server(R) 2016 for Embedded Systems Telecommunications (16 Core)" that are applicable to UC 75 Server and UC 30 Server — EMB\_TELCO\_ATs.pdf

By using UC75, you automatically accept and agree to the terms and conditions of EULA.

## Set up the SBE System

If you use the server with an SBE 100 license and as a headquarters server, refer to the following sections for an overview of the procedures required to set up your SBE 100 system as well as information for where to find specific instructions.

### System Considerations

- Ensure that the server is dedicated only to Connect and that no non-Connect applications other than anti-virus software are installed on the server. For the UC75, a hypervisor also can be installed.
- Ensure the server is placed on a network that has a firewall installed. Do not connect Mitel equipment directly to the Internet.
- Ensure that you have considered protecting the server against viruses and malware. While Mitel recommends that you use anti-virus software to help protect your system, Mitel also recommends that you be aware of the following considerations:
  - Some anti-virus software places a heavy load on the server and can impact server responsiveness. Mitel recommends configuring anti-virus software to run during off hours and to remove the Shoreline and MySQL directories from the anti-virus scan.
  - Mitel recommends using anti-virus software that is specifically designed for servers.
  - Mitel strongly recommends keeping the server updated with the most current Microsoft updates.
- Ensure the server is configured with an administrator account other than the default:
  - a. Create an additional administrator account.
  - b. Disable the default administrator account. Refer to the Microsoft TechNet web site for instructions.

**WARNING!**

To avoid risk of a security breach, administrators **MUST** complete these steps.

### UC75 Virtualization Considerations

- The UC75 includes an Avago SAS 9341-4i RAID controller, which is used to manage data storage virtualization. Administrators must install and implement RAID controller drivers per the type of hypervisor they choose to use.
- Install and configure a hypervisor on the UC75 as per the installation and implementation instructions provided for your choice of hypervisor, and install the appropriate RAID controller drivers for your hypervisor.
- Refer to the “Best Practices for UC75 Deployment” article on <https://www.mitel.com/support> for more information.

### UC30 Server Capacities

The following table includes maximum capacities per server and license combination.

Specification	UC30 SBE100 License	UC30 Enterprise License
Hard Disk Drive Size	1 1 TB	1 1 TB
CPU	Xeon E3-1225-v5 3.3GHz Quad core	Xeon E3-1225-v5 3.3GHz Quad core
RAM	8 GB	8 GB
Network	100Base-T or Gigabit Ethernet	100Base-T or Gigabit Ethernet
Server role	HQ or DVS	HQ or DVS
Max users per system	100	500
Max users per server (phones managed by switches, which are managed by server)	100	500
Max system BHCC	5000	5000
BHCC per server via reports run outside of business hours	2500	2500
Max BHCC per server via reports run during business hours	Not recommended	Not recommended
Max media calls to server*	50	50
Max number of contact center agents	Not recommended	Not recommended

\* Media calls include access to voicemail, Auto-Attendant, workgroups, paging groups, or call recording.

**Note**

The maximum capacity of your Mitel system is defined by hardware (e.g. UC30) in combination with the system license you apply, such as SBE100 or Enterprise. Refer to the Connect ONSITE Planning and Installation Guide for additional information about SBE 100 and Enterprise system capacities. To view this document, visit <https://www.mitel.com/support> and select MiAccess Knowledge Base.

**UC75 Server Capacities**

Users can deploy several applications on UC75 using VMware or Hyper-V hypervisor. Please note that not all applications are supported in Hyper-V.

Specification	UC75 SBE100 License	UC75 Enterprise License
Hard Disk Drive(s) Size Configuration	2 drives 1 TB RAID1 array	2 drives 1 TB RAID1 array
CPU	Xeon E3-1275 v6 3.8 GHz	Xeon E3-1275 v6 3.8 GHz
RAM	16 GB	16 GB
Network	100Base-T or Gigabit Ethernet	100Base-T or Gigabit Ethernet
Max users per system	100	500
Max users per server (phones managed by switches, which are managed by server)	100	500
Max system BHCC	5000	5000
BHCC per server via reports run outside of business hours	2500	2500
Max BHCC per server via reports run during business hours	Not recommended	Not recommended
Max media calls to server*	50	50
Max number of contact center agents	Not recommended	Not recommended
Virtual Cores Max	8	8

Administrators can deploy several applications on UC75 using VMware or Hyper-V hypervisor, but be aware that not all applications are supported in Hyper-V. The administrator can pick and choose applications to run on UC75 based on the customer-specific requirements with the following restrictions: the sum of allocated virtual cores must not exceed 8, the sum of allocated RAM must not exceed 16 GB.

Below are recommended guidelines for configuring virtual machines. The actual performance of the server depends on the customer-specific usage pattern. The administrator must monitor for CPU and memory utilization to ensure both stay under 75% at all times. The administrator can over provision above the recommended guidelines as long as the CPU and memory utilization stay under 75% at all times.

Supported Applications	Virtual Cores	Allocated RAM	Disk Space	Max Cap (SBE License)	Max Cap (Enterprise License)
HQ	4	4 GB	200 GB	100 users	500 users
DVS	2	4 GB	200 GB	100 users	500 users
vSA for IM (no conferencing)	2	2 GB	20 GB	100 IM users	2000 IM users
vSA for IM and conferencing	4	2 GB	100 GB	100 IM users, 50 audio/web participants	2000 IM users, 50 audio/web participants
Mobility	2	2 GB	100 GB	100 users/100 tunnels	100 users/100 tunnels
Virtual IP Phone Switch (primary or spare)	1	2 GB	20 GB	100 users	1000 users
Virtual Trunk Switch (G.711)	1 (2)	2 GB	20 GB	50 (100) trunks w/o advanced features	50 (100) trunks w/o advanced features
Edge Gateway	2	2 GB	100 GB	100 RAST connections, 50 active RAST calls	100 RAST connections, 50 active RAST calls

Refer to the Connect Planning and Installation Guide for more information about minimum virtual server requirements.

## Install and Configure the Operating System

Connect requires Microsoft Windows Server operating system.

The UC30 is shipped with the operating system pre-installed, and no additional actions are required.

For the UC75, the administrator must first install a hypervisor, install RAID controller drivers, and then install the Microsoft Server operating system. The UC75 is shipped with the Microsoft Server operating system installer ISO image. It may be necessary to convert the ISO image into an OVA for installation on VMware ESXi or to a VMF for installation on Hyper-V, depending on the hypervisor you choose. Refer to Microsoft, VMware, and/OR Hyper-V documentation for detailed installation instructions.



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**Notes**

- Ensure that QWave is enabled for Windows, otherwise, audio quality may be poor.
  - Be aware that VMWare support of OVA installer images has recently changed. Refer to the latest Connect build notice on <https://www.mitel.com/support> for more information and workaround steps.
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## Credentials

After installing the Windows Server operating system, credentials for the default admin account are as follows:

- User name: Administrator
- Password: changeme

## Install and Configure Connect

When you purchase an SBE bundle, you have the option of having the Connect software included on a USB memory stick or of downloading the software from <https://www.mitel.com/support>. Please be aware that the download you can retrieve from the support site will always be the most current version of the installer/software.

Refer to the Connect ONSITE Planning and Installation Guide for installation instructions. To view this guide, visit <https://www.mitel.com/support> and select MiAccess Knowledge Base.



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**WARNING!**

Each network port on the server is associated with its own NIC card and has its own IP and MAC address. Select one network port and continue to use only that port for all server activities and configuration. Changing network ports may cause issues with licensing and/or accessibility due to the change in IP and MAC address information.

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## Licensing Considerations

Beginning the first time Connect is launched, a 45-day clock starts. Administrators must enter the Connect license within the 45-day window, or the system will be locked out. Refer to the Registering the Connect Software section of the Connect System Administration Guide for more information. To view this guide, visit <https://www.mitel.com/support> and select MiAccess Knowledge Base.

## Install Mitel Platform Equipment

Install Mitel platform equipment, such as voice switches, distributed voice servers (Linux or Windows, service appliances, and/or Mobility appliances) as needed. Visit <https://www.mitel.com/support> and select MiAccess Knowledge Base and then navigate to the appropriate categories to view related installation and configuration documentation for the platform equipment you want to install.

## Install and Configure Phones

Refer to the documentation for your switch for detailed installation and configuration instructions. Visit <https://www.mitel.com/support> and select MiAccess Knowledge Base and then search for either IP Phones Connect or 400 Series IP Phones Connect.

## Install and Configure the Connect Client

Refer to the Connect Client User Guide and the Connect Client Quick Reference Card for instructions how to install and use the client. To view these documents, visit <https://www.mitel.com/support> and select MiAccess Knowledge Base.

## Install and Configure Additional Connect Applications

Install additional Connect applications as needed for your system. Visit <https://www.mitel.com/support> for related documentation.

## Server Backup and Image Recovery

The Microsoft Server operating system installation includes daily backup tasks that are configured but disabled by default. Administrators must run these tasks on-demand or configure them to run as appropriate. Refer to the Backing Up SBE Systems section of the Connect System Administration Guide for more information about these daily backups, how they impact services, and how to run them. To view this document, visit <https://www.mitel.com/support> and select MiAccess Knowledge Base.

In the event of a server failure, you can recover the Windows image. Refer to the UC Server 30/75 Recovery Image article on the Mitel Support site for more information.