Understanding the platform

Purpose

The Customer Immersion Experience (CIE) platform provides a solution for those in the field who need to setup and configure a clean and fully-configured, lab-like environment that will be used to engage their customers in an interactive manner.

This guide contains critical instructions that must be followed in order to setup and configure the environment correctly prior to your first and all subsequent sessions. It contains detailed information regarding the hardware, software, network, and accounts/passwords that are a preface to the setup instructions provided in two deployment scenarios, including CIE on-premises and CIE for Office 365 as well as the Appendix.

Setup Time

When utilizing the CIE on-premises platform, a full day should be allocated for the initial setup and deployment. This estimate includes physical setup of the server, setting up the Virtual Machines (VMs), client deployment to each of the session participants’ devices, and quick tests to verify successful deployment.

When using CIE for Office 365 platform deployments, it is recommended that you start the Office 365 provisioning process 24-48 hours in advance of the initial setup of the remainder of the CIE environment. All setup should be scheduled and completed well in advance of your first CIE session.

Other Considerations

CIE can be delivered either using on-premises servers or using Office 365 services. With the CIE 4.1 release on February 1, 2013, the on-premises servers have been upgraded to use the new Office; the Office 365 services will be upgraded later in the month (when Office 365 services GA on February 27). Please keep in mind that the CIE delivered using Office 365 services at the time of this release still leverages the Office 365 Preview Services, for which there is no SLA and should be used at your own discretion and risk. Starting March 1, we recommend delivering the CIE using Office 365 and align with Microsoft's larger vision to “Lead with the Cloud”.

For technical support, contact support@microsoftcie.com. CIE technical support has a one business day Service Level Agreement (SLA) based on Central Standard Time (CST). Please keep this in mind when planning setup should you encounter any issues.
Choosing your deployment scenario

In this release of CIE, there are two different deployment and delivery scenarios available which have immediate impact on the setup including hardware, software and services to be configured. Determining which of these two deployment scenarios you will utilize will determine which portions of the Technical Guide to follow in the subsequent sections below.

The **CIE on-premises** scenario allows you to showcase CRM and a more robust BI story. It provides the richest feature set to be showcased, allowing for all client devices to connect directly to the platform that is running locally in the location where the session is delivered. This scenario showcases the robust feature set of Microsoft’s on-premise software, including CRM, Project and BI tools. Given that all resources are local in this scenario, client deployment along with all other application services are provided within the virtual machines running on the Hyper-V host machine. This is similar to previous CIE deployments and utilizes the full set of VMs and local hardware.

The **CIE for Office 365** scenario allows you to showcase Windows To Go and Office On Demand, but offers a completely stand-alone solution for deployment, where the Windows 8 client machines are setup and deployed through a USB thumb drive. In this scenario, we are showcasing Microsoft cloud services, particularly the new wave of the Office 365 suite of products. While this path provides for no server infrastructure to deliver a session, you will need internet access through Wi-Fi or a mobile broadband device. Internet connectivity is not provided through the platform and all devices will connect directly to the internet where the session is being delivered.

*Note: At the current time, the O365 scenario does not allow exposure to CRM or Project and offers a limited exposure to BI tools. If these are important features for the session participants, consider using the on-premises deployment scenario.*
CIE on-premises

Purpose
Following are the tasks that will have to be completed prior to each CIE session. If you will be delivering your CIE sessions from the same host machine each time, you will perform all steps in order for your first time setup. For all subsequent sessions, you would simply start with the steps on the Starting the virtual machines page.

Setup Time
It is highly recommended that you allow an entire day for the steps contained in this section. These steps must be completed successfully before you can complete your CIE session. Setup time averages 6-8 hours for a first time setup, and 1-2 hours for subsequent deployments.

Other Considerations
For technical support, contact support@microsoftcie.com. CIE technical support has a one business day Service Level Agreement (SLA) based on Central Standard Time (CST). Please keep this in mind when planning setup should you encounter any issues.
Software included

Server(s) Software:

- Microsoft Windows Server 2012®
- Microsoft Exchange Server 2013®
- Microsoft SharePoint Server 2013®
- Microsoft Project Server 2013®
- Microsoft Office Web Apps 2013®
- Microsoft SQL Server 2012®
- Microsoft Lync Server 2013®
- Microsoft Dynamics CRM 2011® UR11
- Microsoft System Center Configuration Manager 2012® SP1 Beta

Client Software:

- Windows 8® Enterprise operating system (32 bit)
- Microsoft Office® Pro Plus 2010 SP1 (32 bit)
- Microsoft Office® 2013 Click-to-Run (32 bit)
- Microsoft Visio 2013® Click-to-Run (32 bit)
- Microsoft Project 2013® Click-to-Run (32 bit)
- Microsoft SharePoint Designer 2013® Click-to-Run (32 bit)

Windows & Office Activation:

The entire CIE 4.1 platform is intended to be deployed before each CIE session, thus there is no need to activate the clients or servers. It is recommended that the entire environment have a snapshot taken immediately after copying them to the Hyper-V host machine as well as once all configuration and content provisioning is complete. At the conclusion of each CIE session, the servers can then be rolled back to this second snapshot, saving several hours on subsequent deployments. It is intended and recommended that all client machines be reimaged after each session as well. This will remove any remaining content (malicious or otherwise) from the previous CIE customer briefing. Reimaging the client ensures your attendees are all getting (and you can deliver) a consistent experience.

If for some reason the platform must be activated, which is outside the intended deployment scenario for a CIE session, then keys may be obtained from MSPKD for Microsoft internal employees and/or online through either MSDN or TechNet for certified partners.
Hardware setup

The following instructions may be used as guidance in ensuring the back-end hardware is setup correctly prior to proceeding with the Setting up the clients.

Please refer to the CIE on-premises network diagram to ensure you have a high level view of the working components in this deployment scenario.

1. You will notice that the Hyper-V host server is appropriately placed in the middle of the network diagram as this Hyper-V host server is the center of this deployment scenario. The host server must be powered on with a monitor, keyboard, and mouse plugged in.

2. One of the host NICs (Network Interface Card) will connect via a CAT5e cable to your internet connection as this will become your External NIC - and will be important in the Create the virtual network step. It is recommended that you label the back of the server where this plugs in as 'External' for reference in the future.

3. The 2nd NIC should be connected to your switch via a CAT5e cable and this will become your Internal NIC - and will be important in the Create the virtual network step. It is recommended that you label the back of the server where this plugs in as 'Internal' for reference in the future.
CIE on-premises network diagram
The CIE on-premises platform utilizes the following backend hardware:

- A single physical server (the host)
- A monitor, keyboard, and mouse that will connect to the host
- 2 NICs (Network Interface Cards): typically built into the host, these will allow for intranet and internet access in CIE
- 1 switch that will allow all of the personas’ laptops to connect back to the host
- 1 802.11n WAP (Wireless Access Point) which will provide wireless internet for the Windows Phones that will connect to the CIE environment
- 7 virtual machines as listed below. Each of these houses key components of the CIE environment. These VMs and their content is what will either be downloaded from www.microsoftcie.com or be received via a hard drive:
  - CIE-SRV-00 VM: Windows Server 2012 - System Center Configuration Manager 2012 w/SP1 Beta
  - CIE-SRV-01 VM: Windows Server 2012 - Active Directory Services / DNS / DHCP
  - CIE-SRV-06 VM: Windows Server 2012 - Lync Server 2013 Persistent Chat component

Detailed information on the hardware and peripherals required for a CIE environment is outlined below. All items listed in **bold** represent components that are strongly recommended.

**A single physical server** that meets the following specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor type</td>
<td>Xeon processor(s) with at least 8 physical cores</td>
</tr>
<tr>
<td>Minimum memory</td>
<td>48GB RAM</td>
</tr>
<tr>
<td>Hard Drive type</td>
<td>Minimum of 10k RPM drives but recommend 15k RPM drives</td>
</tr>
<tr>
<td>Network</td>
<td>2 - Gigabit Network Interface Cards (NIC)</td>
</tr>
<tr>
<td>Storage Configuration</td>
<td>Dramatic performance increases with virtual machines house on a multi disk RAID-0 configuration.</td>
</tr>
</tbody>
</table>

**Peripherals:**

- Ethernet cables: 25
- 16-port Gigabit Ethernet Switch: 1
Frontend hardware

The CIE on-premises platform utilizes the following frontend hardware:

- A Windows 8 image is broadcast over PXE from one of the VMs onto the PC devices that will be used for each of the personas in the CIE session.
- Optional Windows 8 tablet device for the facilitator
- Optional WiDi display adapter which allows the facilitator to project from the slate device without a video cable.
- At least one Windows Phone Device running Windows Phone 8, but preferably one phone for each persona if available.
- 1 Polycom CX500/600/Roundtable is connected to one of the PCs
- 8-10 Webcams (Recommend using LifeCam VX-6000)
- 8-10 Headsets (Recommend using LifeChat ZX-6000)
- As many Cat5E cables needed to connect the number of client machines, telephony equipment, network devices, and the host server itself.

At the time of release, the CIE 4.1 on-premises platform supports the machines listed below. While we expect there to be many new Windows 8 certified devices added to this list in the future, we cannot provide troubleshooting and technical support for devices that you attempt to use outside of the list below.

- Lenovo X1 Carbon Touch
- Lenovo Twist

Minimum Specifications

Outside of the supported device list above, the specifications below will assist you in choosing other client machines to support CIE.

<table>
<thead>
<tr>
<th>Machine type</th>
<th>Device with Windows 8 Sticker (OEM support for Windows 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processors</td>
<td>1.4GHz or faster with support for PAE, NX, and SSE2</td>
</tr>
<tr>
<td>Memory</td>
<td>2GB RAM</td>
</tr>
<tr>
<td>Hard drive</td>
<td>60GB SATA II</td>
</tr>
<tr>
<td>Graphics card</td>
<td>At least a DirectX 9 graphics device with WDDM driver</td>
</tr>
<tr>
<td>Display size</td>
<td>At least 1366 x 768 resolution</td>
</tr>
<tr>
<td>Camera</td>
<td>At least a VGA webcam (720p HD camera is preferred)</td>
</tr>
</tbody>
</table>

Audio, Slots, and Ports

<table>
<thead>
<tr>
<th>USB</th>
<th>Two USB 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio</td>
<td>Integrated stereo speakers; Integrated microphone / Stereo headphone / line out / Stereo microphone in</td>
</tr>
</tbody>
</table>
Communication features

| WiFi | 802.11a/b/g/n |

Recommended Accessories

<table>
<thead>
<tr>
<th>Macro Webcam</th>
<th>IPEVO Point 2 View USB Document Camera</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="www.ipevo.com/p2v/">www.ipevo.com/p2v/</a></td>
</tr>
<tr>
<td></td>
<td>(for use in sessions with single Windows Phone)</td>
</tr>
<tr>
<td>Projector</td>
<td>ViewSonic PJD6531w</td>
</tr>
<tr>
<td>Wireless Display</td>
<td>Netgear PTV200 Wi-Di display adapter</td>
</tr>
</tbody>
</table>

UC Devices

<table>
<thead>
<tr>
<th>(Optional) Common Area Phone optimized for use with Lync Server 2010</th>
<th>Polycom CX500</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>(Optional) Desktop Phone optimized for use with Lync Server 2010</th>
<th>Polycom CX600</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Webcams</th>
<th>LifeCam H5D-00001</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>RoundTable</th>
<th>RoundTable</th>
<th>1</th>
</tr>
</thead>
</table>

| Wired headsets | LifeChat ZX-6000 Headsets | 8 to 10 |
Setting up the servers

The CIE 4.1 platform is available for download by Microsoft internal employees and approved CIE partners from [www.microsoftie.com](http://www.microsoftie.com). While you are [Downloading the CIE image](#), you may save time by proceeding with **Create the virtual network(s).**

In order for the CIE platform to be available via download, it is compressed to reduce the distributable file size of the content. The CIE Download Utility software that downloads the environment will also automatically unpack and reconstitute the image for you. No manual un-compression will be needed. See [Downloading the CIE image](#) for more information.

Additionally, you may want to download the CIE PowerShell Scripts from [www.microsoftie.com](http://www.microsoftie.com). These scripts are available to help save time setting up the environment. Refer to the page [Starting the virtual machines](#) for instructions on using these scripts.

Alternately, in rare circumstances, you may receive the CIE platform via an uncompressed external hard drive. In the event you have received the image via hard drive rather than an online download, once you have completed the [Hardware setup](#), you will skip the [Downloading the CIE image](#) steps and can proceed to **Create the virtual network**

Before continuing, you will need to set up your hardware according to the [CIE on-premises network diagram](#).
Downloading the CIE image

Given the significant size and compression ratio of this package, you will need approx. 250GB of free disk space available on your machine before beginning the download.

Utilizing the CIE on-premises platform requires the use of the CIE virtual machines, which are available for download by Microsoft internal employees and approved CIE partners. To begin, navigate to www.microsoftcie.com and log in using your Partner or Microsoft Employee credentials.

Once authenticated, navigate to the resources page and click the On-Premises link.

Then click Get CIE.

If you or your Partner organization have never before been approved to receive the platform, you will be presented with a registration form. If you have been previously approved for access, you will be taken directly to the download section.

Click Download CIE on-premises Virtual Machines to begin the download process.
After a moment, the CIE Download Utility will launch. You will receive a Browse For Folder prompt when the application loads. Select the folder you wish to save your download to and click OK. This window also shows you the total available free space needed in this folder.

Once you have selected your download folder, the CIE Download Utility will begin the download.
You will see 5 files begin downloading, with the remaining showing as Waiting. This is a feature designed to prevent the downloader from consuming large amounts of bandwidth on slower connections. If you have a robust internet connection, you may enable more simultaneous downloads by choosing from the menu in the lower right corner.

At any time, you may right-click on any of these files to Start, Pause, Cancel or see more details on any given segment. If you need to pause your entire download, simply close the CIE Download Utility. A link will be placed on your desktop to resume the CIE download. Clicking this link will resume your download from any point.
Once the download completes, each individual file will be validated by the tool to verify file integrity. If any file fails the integrity check, it will automatically be deleted and downloaded again. Once all files are verified, the tool will begin extraction.

Once the extraction process completes, you are ready to move on to Creating your virtual network and Importing the virtual machines.
Create the virtual network(s)

Next, we need to setup the Virtual Networks. As noted in the back end requirements, you will need to have two separate Network Cards. Each of these cards will be mapped to two separate Virtual Networks. One network will be used 'internally' and will handle communication between the servers and the laptops (contoso.com). The other network will be external and will provide internet access to the environment. Ensure the ports on the back of the server for these two NICs are labeled properly, so you can be sure you are plugging the right cable into the right network port in subsequent sessions.

On the host server, open Hyper V Manager. We will create a new network for CIE Virtual Machines by clicking Virtual Network Manager under Actions on the right hand side of the screen.

Select New virtual network and then External under Create virtual network and then click Add.

You will be selecting External for both the Internal and External networks in this step. In this portion of setup, External simply references that you will be accessing network points outside the server itself (i.e. client laptops).
Name the new virtual network **CIE Private Virtual Network** *(It is important to use the exact same name for the in order to avoid having to re-assign virtual networks to network adapters within the VMs).* Select **External** and then choose the appropriate network adapter from the drop down that maps to the physical NIC that you previously labeled **Internal**.

This network (**CIE Private Virtual Network**) should only be connected to the switch providing access to your laptops. The External network you will create is the only network that should be connected to CorpNet or the network you will be obtaining internet access from.

Click **OK**
To setup the External network, repeat the above steps while only changing the name to **External Network** instead of **CIE Private Virtual Network**. You will also need to select the External connection from the drop down that maps to the physical NIC you previously labeled **External**.
Importing the virtual machines

The following steps are written primarily for Windows Server 2008 R2 – Hyper-V functionality.

Once the CIE Download Utility extraction process has completed, it is a good idea to copy all of the extracted virtual machines files to a separate location (preferably a high performance drive) where you intend to run the CIE platform. This will preserve the set of original files that were extracted from the CIE Download Utility and prevent you from having to download the platform again should your VMs become corrupt or unusable, or if you need to import them into a new server.

Once the copy has completed, you will import the newly copied VMs into Hyper-V following the steps outlined below.

**Click Import Virtual Machines** under Actions.

Click **Browse** to locate the VM (e.g. CIE4_0_1 Extracted) folder where you copied the virtual machines.
..or if you are using Windows Server 2012 on your host machine, then you will choose the below option.

Click on CIE-SRV-00 and click Select Folder and then click Import.

! You may receive a warning message if you have not created the virtual networks as outlined on the Create the virtual network(s) page. It is recommended that you delete this machine, follow the steps to create the virtual networks and then re-import. This will ensure all networks are setup correctly for the machines.

Repeat this process for each of the CIE-SRV-0x virtual machines.

After import, you will want to verify the network settings have imported properly on each VM.
Open the **Settings** menu and ensure the **CIE Private Virtual Network** that was created above is assigned to each virtual machine **Network Adapter**.

Once you have verified the network settings, you may want to adjust a few of the settings for each virtual machine to match the hardware available in your environment. The CIE on-premises environment comes with pre-defined settings to match our recommended hardware minimums. Memory is pre-allocated per the chart below and all VM’s have 2 processor cores assigned. If you have more resources available, you may increase these settings.

In the settings window for each of the VMs, we can allocate the memory. Select **Memory** while in the **Settings** window and enter the amount of RAM you wish to assign. You can also select **Processor** and adjust the number of cores assigned to each VM. (Note: the VM must be turned off in order to make such changes)
The following table provides recommendation for host machines with 48GB of RAM. If your machine has more memory than this that you wish to allocate, you may increase your memory allocations above and beyond the table below.

<table>
<thead>
<tr>
<th>Machine</th>
<th>Required/Optional</th>
<th>if =&gt;48GB total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIE-SRV-00</td>
<td>Required</td>
<td>6144 MB</td>
</tr>
<tr>
<td>CIE-SRV-01</td>
<td>Required</td>
<td>2048 MB</td>
</tr>
<tr>
<td>CIE-SRV-02</td>
<td>Required</td>
<td>10240 MB</td>
</tr>
<tr>
<td>CIE-SRV-03</td>
<td>Required</td>
<td>10240 MB</td>
</tr>
<tr>
<td>CIE-SRV-04</td>
<td>Required</td>
<td>10240 MB</td>
</tr>
<tr>
<td>CIE-SRV-05</td>
<td>Required</td>
<td>4096 MB</td>
</tr>
<tr>
<td>CIE-SRV-06</td>
<td>Optional*</td>
<td>2048 MB</td>
</tr>
<tr>
<td>Host OS</td>
<td>N/A</td>
<td>4096 MB</td>
</tr>
</tbody>
</table>

Click **OK** to close the Settings window and repeat these steps for each of the VMs that have been imported into the Hyper-V Manager.

*If you choose not to deploy this server, the Lync Persistent Chat feature will not be available. You will also
see a yellow warning banner on your Lync clients stating the chat server is unavailable. All other features of Lync will continue to function.
Starting the virtual machines

Before starting your VMs for the first time, you will need to take a snapshot of each VM as your baseline. This snapshot can be applied should you need to get back to a clean import state. You will also take a snapshot after Provisioning virtual machine content. This will be applied after the completion of each CIE session to refresh the state of the environment in preparation for another session.

Two PowerShell Scripts can be downloaded separately from the CIE platform, Get CIE page of the www.microsoftcie.com site. You will find these PowerShell Scripts under the Technical Setup section of the Get CIE page. These scripts will help you capture and rollback snapshots. If you have not downloaded these yet, please do so at this time.

The following instructions allow you to leverage the Snapshot feature within Hyper-V to snapshot each Virtual Machine and thus the ability to roll back to a pristine state at the conclusion of each session.

Due to synchronization issues between each of the VMs and the Domain Controller, we only support snapshots if all Virtual Machines have had snapshots taken at the same time.

We have created two PowerShell scripts: SnapShot VMs.ps1 and Rollback VMs.ps1

When you have the CIE platform ready to take a snapshot, you can use the SnapShot VMs.ps1 file to snapshot all CIE VMs.

Simply right click on the SnapShot VMs.ps1 file that you downloaded and click Run with PowerShell.
You should then see a PowerShell window pop up that tells you the progress of each machine being reimaged.  *It is important that you not close this window until it has completely finished.*

Once this PowerShell script completes, you may start your CIE VMs. To start a VM, select the VM within the Hyper-V Manager and then **click Start** from the **Actions** menu below. Repeat this process for both VMs.

The snapshot you have just created can be used to reset the environment to a clean import state. At the conclusion of each session you will roll-back to the snapshots you will create in the **Provisioning virtual machine content** section by running the **Rollback VMs.ps1**. This script will reset all of the virtual machines to their prior state. Keep in mind that in doing so, you will still need to reimage the clients. Refer to the **Resetting the CIE platform** page for detailed instructions on rolling back.
If you would rather take and apply your snapshots manually, you can also follow the steps below.

To take a **Snapshot**, open **Hyper-V Manager** and select the virtual machine. Next, click **Snapshot** located in the **Action** pane. Repeat for all six CIE virtual machines.
Internet setup

Standard Internet setup

The CIE 4.1 environment has been built and designed to natively work with any standard internet connection out of the box. If you are using a standard, non-CorpNet internet connection, you should not need to perform any additional setup for internet access to pass through to your servers and clients.

Microsoft CorpNet Internet setup

If you are deploying the CIE 4.1 platform to a Hyper-V host server that is bridged to the Microsoft corporate network, then you will need to update the DNS Forwarders on CIE-SRV-01.

Before updating the DNS forwarders on the Contoso AD DNS server, you will need to obtain the appropriate DNS servers for your locale on corpnet. On your Hyper-V host machine you will open a command prompt window and issue the `ipconfig /all` command and take note of the DNS Servers that are listed in the results for the Local Area Connection that is connected to corpnet.

![Command Prompt showing IP configuration](image)

Launch the DNS management console from the start screen.
In **DNS** management console, right click on the **CIE-SRV-01.contoso.com** server and select **Properties** from the context menu that appears.

Select the **Forwarders** tab and then click on the **Edit** button below.
Replace the generic public DNS servers with the corpnet DNS servers that you noted above, before clicking **OK**. **Note:** You will know that you have provided the current IP addresses when they successfully validate in this window.

Although you could probably get by with restarting DNS services on this VM, we recommend that you reboot **CIE-SRV-01** in order to restore Internet service to all servers and VMs within the Contoso domain.
Verify server configuration

Now that the CIE platform is running on your Hyper-V host, you will need to ensure the servers are configured appropriately. To start this process, double-click on any one of your CIE Hyper-V Machines to launch a connection window. At the log on screen, login as CONTOSO\Administrator with a password of pass@word1.

Once the Server logs in successfully and you are on the desktop of the VM, click the icon for the CIE Server Validation Utility.

This will launch the tool and it will identify any services that have not started, will restart them if able and verify you have the latest version of CIE. If the tool detects no issues, it will show Check Completed and All Services Started.

*Note: The tool checks services on all other VMs running in the platform, therefore it is not necessary to run this tool from each VM. Additionally, while this tool will run with no internet connectivity, it is highly recommended your environment has an internet connection when running this tool. The tool will push updates and notifications to you should the platform version update or patches need applied as long as an internet connection is present.*
In the event the **Check Completed with Errors** it will show the number of **Service Failed to Start**. Click on **View Services** for more details.

Clicking on **View Services** will allow you to see what service the tool was unable to restart.

After viewing, you can return to the main screen and click the **Refresh** icon to have the tool attempt a restart again (If you do not click Refresh, the tool will continue to automatically attempt a restart three times). If it is still unable to start, the Details column will show Reboot. Clicking on Reboot will reboot the server that the problematic service is on.
Once the reboot is complete, rerun the tool to validate the service will restart. If you are still unable to get a service started after a reboot and rerun of the CIE Server Validation Utility, contact the CIE Support team at support@microsoftcie.com.
Provisioning virtual machine content

After completing **Starting the virtual machines**, you are ready to provision content into your CIE environment following the steps below.

**Setup Time** Assuming you have met the recommended hardware requirements in place that were outlined in the Back end hardware page, provisioning content should take approximately **3 hours**. Please make certain you have **enough time to leave your machines on and running** before you start provisioning content.

⚠ Before provisioning content for the first time, you **must** allocate additional memory (per the instructions below) to the CIE-SRV-04 for provisioning to complete properly.

To being provisioning content, first shut down your Hyper-V machines by clicking on each machine and selecting **Shutdown**.

**Click** on CIE-SRV-04 and then **Settings**. Click **Memory** and double the value in the **RAM** field to **20480**. Then select **OK**.

Once you have reallocated memory to CIE-SRV-04, right click on CIE-SRV-01, CIE-SRV-02, CIE-SRV-03 and CIE-SRV-04 and select **Start** (you will leave CIE-SRV-00, CIE-SRV-05, and CIE-SRV-06 offline).

While your VM's are rebooting, you will proceed to download the CIE Setup Assistant.

From your Hyper-V Host machine, visit **www.microsoftcie.com**. Once authenticated, navigate to the resources page and click the **On-Premises** link.

Then click **Download CIE**.

Once on the download page, accept the EULA and then click **CIE Setup Assistant** to download the tool.

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Once installed, the tool will launch.

Before proceeding to the next step, you will need to verify CIE-SRV-01 through CIE-SRV-04 are now fully online.

Once it has launched, select Create from the main page of the Setup Assistant. Then click On-Premises.

The tool will begin checking your VM’s to validate the version of content (if any) that has been provisioned. If this is your first time setup, you will see ‘Setup your VMs for the first time’. The tool will also show you the number of installation files it needs to download along with the total size. Click Download.

The updates will now be downloaded. Depending on the size, this could take as little as several minutes to as long as an hour or two.
Once the **Download** has completed, Setup is almost ready to begin. As a final step, log into one of the VMs (preferably CIE-SRV-02) and run the CIE Server Validation Utility (as outlined in the previous step 'Verify server configuration'). This makes certain the tool can recognize and communicate with your virtual machines.

In this step, it is normal to see Server Unavailable on the servers you still have shutdown. Simply validate you show green on the 4 machines you have started.

You will also want to verify you can navigate to [http://intranet.contoso.com](http://intranet.contoso.com) from any of the machines. The IIS instance on CIE-SRV-04 can sometimes need resetting after Hyper-V rollbacks, so due to the length of time it takes to provision content, it is best to verify it is up and running prior to your start. If you can hit a standard SharePoint page, you may continue on to the next step. If you see an error like the one below, you will need to perform an IIS reset on CIE-SRV-04.

To perform an IIS reset, log into CIE-SRV-04 and open a command prompt. At the command prompt type `iisreset` and hit enter. Once this command finishes, verify you can hit [http://intranet.contoso.com](http://intranet.contoso.com) and get a standard SharePoint page. (Note: This page will not have content and will be a blank site)

Once you have confirmed the above, check the box confirming this and click Begin Setup.
During content provisioning, you can click on a server name to view the live log feedback from that server. Once you receive green checkmark icons next to all server names, your provisioning is complete. You will also see a Provisioning Complete tag at the bottom of the log file when the machine is finished.

Once all provisioning completes, you will need to reallocate the memory and capture another round of snapshots of your VMs that contain the newly provisioned content packs.

First, shutdown the 4 running VMs using standard Windows shutdown commands. Once shutdown, reopen the memory settings on CIE-SRV-04 and adjust back to 10240. Click OK.

Next, take another snapshot of all of your VMs (as outlined in Starting the virtual machines) This will become your primary snapshot for rolling back after a session. Using this snapshot ensures you will not have to perform the initial content provisioning during subsequent rollbacks.

Now you are ready to move on to Verify server configuration. If you experience trouble using the CIE Setup Assistant, please see Troubleshooting CIE Setup Assistant.
Setting up the clients

Imaging a client for use with the CIE on-premises platform is an automated process that can be performed on multiple devices simultaneously. Imaging time for each device is approximately 60 minutes.

Before you begin, make certain your on-premises CIE environment is setup according to the Setting up the servers portion of the guide. You will also need all hardware connected according to the CIE on-premises network diagram.

To begin, continue on to Client imaging.
Starting with any of the client devices connected to your CIE network switch, press the power button to power on the PC. Begin pressing F12 until you are prompted with a boot menu. From this boot menu, you will want to select the PXE or LAN option.

As OEMs implement startup methods uniquely for each PC, we are unable to provide exact guidance on the network boot key combination you will need to use, however the large majority of PCs will utilize the F12 key and provide an option to network boot from the Ethernet port. **Newer PC’s may require you to disable Secure Boot and UEFI only boot options in order to PXE boot.** If you are unable to continue as your PC does not have this option or you are unable to PXE boot even after disabling Secure Boot and UEFI boot options, please contact CIE Support at support@microsoftcie.com for help with your specific instance.

After selecting the LAN option, you will see the PXE environment begin to load. Once you see **Press F12 for network service boot**, immediately press F12 again.

At this point, you will see a status bar stating **Loading files...**
Note: If you do not see the above Loading Files... window and instead see a window
Please read the note regarding the type of Windows 8 Enterprise image license that you will select in the following screen and type **ok** before clicking **Next**.

Select either the **Windows 8 - Internet Available** or **Windows 8 - No Internet Available** from the list and select **Finish**.
Your client will now begin imaging. Repeat these steps for each of your client laptops connected to the CIE network switch.
Once the CIE imaging environment boots up, you will be presented with a wizard. Press Next.

If the PC reboots before reaching this wizard, see Troubleshooting Client Imaging.

The rest of the imaging process is automated. Once complete, the client machine will be resting at a Windows 8 lock screen. At this point, you may proceed with the Setting up Windows Phones.
Setting up Windows Phones

itage Time Configuring each Windows Phone device may take anywhere from 10 to 30 minutes to complete.

We must first connect to the WLAN on the device by *swiping left* in order to reach the list of applications on the device. Scroll down until we can select **Settings**.

In the settings screen we will select **Wi-Fi** and look for the name of the WLAN that has been setup and configured already.

Select that WLAN and then enter a password if necessary, before selecting **done**.

Before you can configure Outlook, you must first install Contoso's root CA certificate. This will also allow you to access IRM protected messages during the session. This step is necessary to complete only once, unless you perform a hard reset of the phone device.

To download and install the certificate, launch IE browser to [http://cert.contoso.com](http://cert.contoso.com). Then tap **Download CA certificate** and tap **Install** when prompted.
Now we can begin the installation and configuration of the Outlook/Exchange mailbox on the device.

Press the start button to get back to the home screen and swipe left again in order to find the settings option. This time under mail settings, we will select email & accounts and then choose add an account.

If you have previously used the Windows Phone, you will need to first delete the account you used in the past and then proceed with adding an account.

Select Outlook as the account type and then enter the email address of the user you want to configure (e.g. karenb@contoso.com), followed by that user’s password (in this case, pass@word1) and then select sign in.
in. This user’s email, contacts and calendar should begin to sync onto the device. Repeat these steps for each subsequent persona.

In order to display emails from the past that were sent when the platform was configured, you must configure each of the email accounts (under Settings) that have been setup and choose to Download email from any time. The Windows Phone by default will be set to display email from the last 7 days so this must be changed to see the emails.

Moving onto the Office Hub configuration we will **Swipe left** from the **Start Screen** in order to scroll through the **Applications** list and select **Office**.

In the **Office Hub**, **swipe left** until you find **Places**. Select the **New** button in order to enter the SharePoint address of the Northwind Traders Team Site. (e.g. [http://intranet.sharepoint.com/accountteams/eurasia/northwind](http://intranet.sharepoint.com/accountteams/eurasia/northwind))

In order to download and install Apps from the store (e.g. SharePoint Newsfeed) as well as show a personal calendar, you will need to verify the CIE platform has Internet access, and setup a personal Live ID account in
Email & Accounts on the Windows Phone. Once this account has been added you can create calendar events which conflict with those we have already configured in Outlook / Exchange. Once complete tap the

From the start screen, **Swipe left** to find the **Store** from the list of apps so that we can search for the **SharePoint Newsfeed** app. Tap on the **Search** icon at the bottom of the screen and then enter **SharePoint** before selecting **SharePoint newsfeed** from the **Apps+Games** category.

Tap on the **SharePoint Newsfeed** app and then the **install** button at the bottom of the screen. This will begin the download and install process, which provides a status bar below the app in the list.

Once the installation has completed, you can launch the app by tapping on it one last time.

Enter the URL for your tenants SharePoint My Site: **my.contoso.com**

Provide the credentials for the user persona of this device, by entering the entire email address (e.g. **karenb@contoso.com**) and **pass@word1** before tapping **Sign In**.
Lync Mobile is not supported in CIE 4.1, but will be supported for Windows Phone 8 in CIE 4.5.

**Note:** If you are planning to use only one Windows Phone in the environment, consider utilizing a Macro Webcam like **IPEVO Point 2 View USB Document Camera** to make it easier for the participants to follow (see more information on the **Front end hardware** page in the **Hardware requirements** section).
Resetting the CIE platform

It is recommended that you always start with a clean CIE platform before each session. This includes all virtual machines and the client images. If you always start clean, you will always know what to expect and each customer should have the same end user experience. Attempting to undo the changes that occurred in a previous session is not recommended nor supported as it is a difficult and risky task. Something could easily be overlooked and have cascading affects within any of the provided scenarios. Instead, please follow the below instructions to reset your environment.

Resetting the CIE platform can be accomplished in one of two ways. Please review the options below and pick the one that best fits your situation.

Please read the Windows & Office Activation section (at the bottom of the Software included page) before adopting either of the options below. You should also have a good understanding of Hyper-V Snapshots.

**Option 1 - Rolling back servers with Rollback.ps1**

Leveraging the Snapshot’s taken when your VMs were imported, you are able to roll back to a pristine state at the conclusion of each session.

Due to synchronization issues between each of the VMs and the Domain Controller, we only support snapshots if all Virtual Machines have had snapshots taken at the same time.

To help facilitate this process, we will use the Rollback VMs.ps1 as mentioned in the Starting the virtual machines section.

This script will reset all of the virtual machines to their prior state. Keep in mind that in doing so, you will still need to reimage the clients.

Simply right-click on the Rollback Snapshot VMs.ps1 file that you downloaded and click Run with PowerShell.
Option 2 - Manually rolling back servers

If you would rather rollback your servers manually, you can also follow the below steps.

To revert back to previous snapshot after your CIE session has finished, open **Hyper-V Manager**. Under the **Snapshots** pane select the server name and click **Apply** located in the **Actions** pane. **DO NOT click Delete Snapshot.**
You will receive an **Apply Snapshot** warning dialog window with three options. Select the **Apply** option.

Repeat this process for all CIE virtual machines.

Once your machines have been rolled back, complete the [Verify Server Configuration](#) page and entire [Setting up the clients](#) section prior to your next session.
These tasks are the set of tasks that will have to be completed prior to each CIE session.

It is highly recommended that you allow half a day after your tenant is provisioned for the steps contained in this section. These steps must be completed successfully before you can begin your CIE session. Provisioning time averages 8-24 hours. Post provisioning setup time averages 4 hours per deployment. It is recommended that you start the Office 365 provisioning process 24-48 hours in advance of the initial setup of the remainder of the CIE environment.

For technical support, contact support@microsoftcie.com. CIE technical support has a one business day Service Level Agreement (SLA) based on Central Standard Time (CST). Please keep this in mind when planning setup should you encounter any issues.
Software included

Client Software:

- Windows 8® Enterprise operating system (32 bit)
- Microsoft Office® Pro Plus 2010 SP1 (32 bit)
- Microsoft Office® 2013 Click-to-Run (32 bit)
- Microsoft Visio 2013® Click-to-Run (32 bit)
- Microsoft Project 2013® Click-to-Run (32 bit)
- Microsoft SharePoint Designer 2013® Click-to-Run (32 bit)

Online Services:

- Office 365 Preview

Windows & Office Activation:

It is intended and recommended that all client machines be reimaged after each session as well. This will remove any remaining content (malicious or otherwise) from the previous CIE customer briefing ensures your attendees are all getting a consistent experience.

The CIE 4.1 for Office 365 client images utilizes an evaluation build of Windows 8, allowing for you to showcase CIE for Office 365 without the need to activate Windows with standard keys.
In advance of your CIE for Office 365 deployment and prior to any client setup, you will need to provision your Office 365 tenant. We highly recommend provisioning your trial tenant 48 hours in advance of your session.

To begin, visit [www.microsoftcie.com](http://www.microsoftcie.com). Once authenticated, navigate to the resources page and click the **Office 365** link.

![Office 365](image)

Then click **Download CIE**.

![Download CIE](image)

Once on the download page, accept the EULA and then click **CIE Setup Assistant** to download the tool.

![CIE Setup Assistant](image)

Once installed, the tool will launch.

![Setup Assistant](image)

Once loaded, select **Create** from the main page of the **Setup Assistant**. Then click **Office 365**.
Select your Country from the drop down and enter your desired tenant name.

Enter the email address you would like notifications about your provisioning status to go to, and type the verification code. Then click **Create**.

You will see a message that the tool is trying to create your tenant.

Once it successfully creates the tenant, the tool will show begin showing the current status of the tenant provisioning.
Should you need to close the tool, you may return to this page by returning to the tool, and clicking **Status** and then **Office 365**.

Type in your tenant name and click **Check Status**.

Please allow 8 to 24 hours for provisioning to complete.

Once your tenant completes provisioning, you are ready to move on to the **next step in your setup**.
Hardware setup

The following instructions may be used as guidance in ensuring the hardware is setup correctly prior to proceeding with the Client hardware setup.

Refer to the CIE for Office 365 Network Diagram to ensure you get a high level view of the working components in this deployment scenario.

You will need to have made arrangements for Internet access, so that the client machines will be able to connect to the Office 365 application services.
CIE for Office 365
Network Diagram

The following diagram depicts how a CIE for Office 365 session may be setup using a bootable USB thumb drive(s) for image deployment. Once the image has been deployed to the Windows 8 PC device you can utilize any wireless LAN or mobile broadband Internet service available.
CIE for Office 365

Hardware

The CIE for Office 365 deployment scenario requires the following back end hardware:

- 1 802.11n WAP (Wireless Access Point) or a sharable broadband Internet connection device which will provide wireless internet for the Windows 8 PC devices and Windows Phones that will connect to the online services (Office 365) tenant.

The CIE for Office 365 platform utilizes the following front end hardware:

- Several 16GB USB thumb drives to deploy the Windows 8 image onto the PC devices that will be used for each of the personas in the CIE session. (The more thumb drives you have prepared, the more client machines you will be able to image simultaneously.)
- Optional Windows 8 tablet device for the facilitator
- Optional WiDi display adapter which allows the facilitator to project from the slate device without a video cable.
- At least one Windows Phone Device running Windows Phone 8, but preferably one phone for each persona if available
- 1 Polycom CX500/600/Roundtable is connected to one of the PCs
- 8-10 Webcams (Recommend using LifeCam VX-6000)
- 8-10 Headsets (Recommend using LifeChat ZX-6000)

At the time of release, the CIE 4.1 for Office 365 platform supports the machines listed below. While we expect there to be many new Windows 8 certified devices added to this list in the future, we cannot provide troubleshooting and technical support for devices that you attempt to use outside of the list below.

- Lenovo X1 Carbon Touch
- Lenovo Twist
- Samsung ATIV Tab

Minimum Specifications

Outside of the supported device list above, the specifications below will assist you in choosing other client machines to support CIE.

<table>
<thead>
<tr>
<th>Machine type</th>
<th>Device with Windows 8 Sticker (OEM support for Windows 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processors</td>
<td>1.4GHz or faster with support for PAE, NX, and SSE2</td>
</tr>
<tr>
<td>Memory</td>
<td>2GB RAM</td>
</tr>
<tr>
<td>Hard drive</td>
<td>60GB SATA II</td>
</tr>
<tr>
<td>Graphics card</td>
<td>At least a DirectX 9 graphics device with WDDM driver</td>
</tr>
<tr>
<td>Display size</td>
<td>At least 1366 x 768 resolution</td>
</tr>
<tr>
<td>Camera</td>
<td>At least a VGA webcam (720p HD camera is preferred)</td>
</tr>
</tbody>
</table>

Audio, Slots, and Ports

<table>
<thead>
<tr>
<th>USB</th>
<th>2 USB 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio</td>
<td>Integrated stereo speakers; Integrated microphone / Stereo headphone / line out / Stereo microphone in</td>
</tr>
</tbody>
</table>

Communication features

| WiFi                                   | 802.11a/b/g/n |
Setting up the clients

When imaging clients for use with CIE for Office 365, you will need to use a USB thumb drive (or some sort of USB connected external hard drive) to deploy the image to the clients.

You will first need to download the image that will be used to create the thumb drive. You can use any standard USB thumb drive or external hard drive that is at least 16GB in size.
Client imaging

This is an ISO file that can be used to create USB thumb drive media that will image your client laptops in preparation for a CIE for Office 365 session.

**Downloading the image**

The Windows 8 ISO Image need for CIE for Office 365 is available for download by Microsoft internal employees and approved CIE partners. This is an ISO file that can be used to create USB thumb drive media that will image your client laptops in preparation for a CIE for Office 365 session.

To begin, navigate to [www.microsoftcie.com](http://www.microsoftcie.com) and log in using your Partner or Microsoft Employee credentials.

Once authenticated, navigate to the resources page and click the **On-Premises** link.

Then click **Get CIE**.

If you or your Partner organization have never before been approved to receive the platform, you will be presented with a registration form. If you have been previously approved for access, you will be taken directly to the download section.

Once on the Download page, select **Download Windows 8 ISO Image** to begin downloading the ISO image that will be used to create your USB Thumb Drive issue.
Note: This drive will be used to erase and image clients in place of an Imaging Server. This is not to be confused with a Windows To Go drive.

To aid in the creation of the thumb drive, download ISO to USB from http://isotousb.com/isotousb_setup.exe.

Once you have downloaded this file, run the setup program to install it. Once installed, launch the program.
Click the **Browse** button to navigate and select the ISO file you downloaded from the Microsoft CIE website. Then, select the thumb drive you wish to use from the drop down menu, select the **Bootable** check box and click **Burn**. The tool will then create a fully functioning USB image of the client deployment tool. This process can take as little as 20 minutes on a USB 3.0 device and up to 1 hour on a USB 2.0 device.

**Please note, this process will erase ALL content on the drive you use.**

The thumb drive creation process may be performed on as many thumb drives as you wish to use. You can create a thumb drive for each laptop in your CIE kit, or use one thumb drive to image each machine in series.

**Imaging the client**

As OEMs implement startup methods uniquely for each PC, we are unable to provide exact guidance on the network boot key combination you will need to use, however the large majority of PCs will utilize the F12 key and provide an option to network boot from the Ethernet port. Newer PC’s may require you to disable Secure Boot and UEFI only boot options in order to PXE boot. If you are unable to continue as your PC does not have this option or you are unable to PXE boot even after disabling Secure Boot and UEFI boot options, please contact CIE Support at support@microsoftcie.com for help with your specific instance.

Once the process is complete, plug the newly created USB Thumb Drive image into an available USB port on your client machine, boot the machine and press F12 to enter the boot options menu (or whatever the given key may be for your PC device). Select the option to boot to the USB drive (this may look different depending on your machine, but should have the label USB in the option). This will execute the Task Sequence wizard that will deploy the client image to your client.
About 15 - 20 minutes into the Task Sequence, the PC will restart out of the Window PE (Pre-installation Environment) and into Windows 8 for the first time. If your PC is configured to boot from the USB drive by default (as is the case on most slate PC devices), then you will need to remove the USB thumb drive while the PC completes the POST (Power On Self-Test) and then re-insert the thumb drive once Windows 8 has started.

Once the client has completed the image deployment process, you will need to continue to Client configuration.
Client configuration

Before your session, you will want to configure the client for the Office 365 user you will be using on that machine.

Log into the desired persona’s account on each device and complete the following steps:

**Run the CIE Desktop Configuration Tool**
The following steps will need to be performed once on each of the 8-10 client devices.

While still logged into the persona’s desktop, double click on the CIE Desktop Configuration Tool icon found on the desktop.

Once the install has completed, you will see the following pop-up:

Here you will need to enter the domain name you will be using for your CIE session (this should correspond with the domain name you used when provisioning your O365 tenant using the CIE Provisioning Assistant) and select the user you will be provisioning (corresponds to the user you are logged in as on the desktop). Once completed, click Continue. During this process, Outlook will open.

! **While the Client Provisioning tool is running, it is important not to close the window or access other programs. This is to ensure the tool runs completely. The tool may close prior to Outlook’s configuration**
completing. Allow Outlook to finish configuration before moving on.

If you get prompted for the user’s name and initials, click OK to accept the pre-populated information.

Outlook should now start populating emails, calendar events, etc.

**Office 365 Portal Setup**

Once Outlook has completed setup, open Internet Explorer, which will take you to the Microsoft Online portal.

Type in the user name (e.g. karenb@[yourtenantname].onmicrosoft.com) and password: pass@word1

You are now taken to the user’s online services home page where the user can navigate to the SharePoint site (via the Sites link on the top navigation bar) and open OWA (by clicking Outlook on the top navigation bar).
Repeat the steps in this section on each client device. You can now move on to Setting up Windows Phone devices.
Setting up Windows Phones

Configure each Windows Phone device may take anywhere from 10 to 30 minutes to complete.

We must first connect to the WLAN on the device by **swiping left** in order to reach the list of applications on the device. Scroll down until we can select **Settings**.

In the settings screen we will select **Wi-Fi** and look for the name of the WLAN that has been setup and configured already.

Select that WLAN and then enter a password if necessary, before selecting **done**.

Now we can begin the installation and configuration of the Outlook/Exchange mailbox on the device.

Press the start button to get back to the home screen and **swipe left** again in order to find the **settings** option. This time under mail settings, we will select **email & accounts** and then choose **add an account**.

If you have previously used the Windows Phone, you will need to first delete the account you used in the past and then proceed with adding an account.
Select **Outlook** as the account type and then enter the email address of the user you want to configure (e.g. karenb@<yourtenantname>.onmicrosoft.com), followed by that user’s password (in this case, pass@word1) and then select **sign in**. This user’s email, contacts and calendar should begin to sync onto the device. Repeat these steps for each subsequent persona.

---

In order to display emails from the past that were sent when the platform was configured, you must configure each of the email accounts (under **Settings** that have been setup and choose to **Download email from** any time. The Windows Phone by default will be set to display email from the last 7 days so this must be changed to see the emails.

---

Moving onto the Office Hub configuration we will **Swipe left** from the **Start Screen** in order to scroll through the **Applications** list and select **Office**.

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In the **Office Hub**, **swipe left** until you find **Places**. Select the **New** button in order to enter the SharePoint address of your tenant’s Northwind Traders Team Site.
(e.g. [https://xxxxtenantnamexxxx.sharepoint.com/accountteams/eurasia/northwind](https://xxxxtenantnamexxxx.sharepoint.com/accountteams/eurasia/northwind))
In order to download and install Apps from the store (e.g. SharePoint Newsfeed) as well as show a personal calendar, you will need to verify the CIE platform has Internet access, and setup a personal Live ID account in Email & Accounts on the Windows Phone. Once this account has been added you can create calendar events which conflict with those we have already configured in Outlook / Exchange. Once complete tap the

From the start screen, **Swipe left** to find the **Store** from the list of apps so that we can search for the **SharePoint Newsfeed** app. Tap on the **Search** icon at the bottom of the screen and then enter **SharePoint** before selecting **SharePoint newsfeed** from the **Apps+Games** category.
Tap on the SharePoint Newsfeed app and then the install button at the bottom of the screen. This will begin the download and install process, which provides a status bar below the app in the list.

Once the installation has completed, you can launch the app by tapping on it one last time.

Enter the URL for your tenants SharePoint My Site: yourtenantname-my.contoso.com

Provide the credentials for the user persona of this device, by entering the entire email address (e.g. karenb@<yourtenantname>.onmicrosoft.com) and pass@word1 before tapping Sign In.

Lync Mobile is not supported in CIE 4.1, but will be supported for Windows Phone 8 in CIE 4.5.

Note: If you are planning to use only one Windows Phone in the environment, consider utilizing a Macro Webcam like IPEVO Point 2 View USB Document Camera to make it easier for the participants to follow (see more information on the Front end hardware page in the Hardware requirements section).
Resetting the CIE platform

It is recommended that you always start with a clean CIE platform before each session. This includes all of the client images. If you always start clean, you will always know what to expect and each customer should have the same end user experience. Attempting to undo the changes that occurred in a previous session is not recommended nor supported as it is a difficult and risky task. Something could easily be overlooked and have cascading affects within any of the provided scenarios. Instead, please follow the below instructions to reset your environment.

For CIE for Office 365 deployments, resetting the platform is simple. First, you will need to refresh your Office 365 tenant or create a new tenant before your next session. Additionally, you will need to complete the Setting up the clients section prior to your next session.
Appendix
Troubleshooting
Below are some scenarios you may face when using the CIE Setup Assistant.

✧ If the tool is unable to communicate with a particular machine, you will receive the message below. Please validate that all your machines are online.

If your machines are all online and you still receive this message, click the Advanced Settings cog and check that your servers are properly mapped. If a server is missing a mapping, select the appropriate server from the drop down list and click Continue.
Periodically, we may release updates to the content you provision. After you’ve successfully provisioned your content once, you will be able to update your content easily using the CIE Setup Assistant. These updates will be much smaller in size than the original content pack, and should take minimal time to install. To check for updates, select Create from the main page of the Setup Assistant. Then click On-Premises.

The tool will check the current version of content on your VMs, and compare to our update point. If updates are available, you will see a message stating the number of updates available and the total size of the download.
Hovering over Details will provide you a breakdown of the versions currently available and the versions applied to your VMs.

Simply click Download and follow the screens to update your content.

✧ To return to check the status of provisioning at any time, select the Status link from the CIE Setup Assistant and click On-premises.
Validate your servers map properly, and click **Check Status**.

![Check Create Status](image)

Click on a server name to view the live log feedback from that server. Once you receive green checkmark icons next to all server names, your provisioning is complete. You will also see a Provisioning Complete tag at the bottom of the log file when the machine is finished.

![Status of Environment Setup](image)
**Client imaging**

---

**Client reboots before imaging wizard appears**

Generally, client imaging deployments through SCCM are seamless and require no intervention. Occasionally though, a machine may not complete imaging properly the first time. In these instances, SCCM can mark the machine as unknown, and require user intervention to allow the machine to image properly again. This is usually evident by the machine reaching *Initializing hardware devices...*

But failing to reach the **Task Sequence Wizard** and the machine then reboots and this process repeats itself.

To resolve this issue, you will need to remove the offending machine account from SCCM's devices list to resolve the issue. To do so, Connect to CIE-SRV-00 in Hyper-V Manager. Log into CIE-SRV-00 as **CONTOSO \Administrator (Password: pass@word1)**.

From the desktop, click on the SCCM Console icon pinned to the taskbar.

![Configuration Manager Console](ConfigurationManagerConsole.png)

Select Devices under Assets and Compliance

![Assets and Compliance](AssetsAndCompliance.png)

Right-Click on any machine beginning with MININT and click Delete.
Confirm the deletion by select Delete again.

![Confirm Deletion dialog box]

You may now reattempt your client imaging.
Advanced Setup
Create Task Sequence Media

You may need to create some form of bootable media (ISO) in order to deploy a client image of your own from the CIE 4.1 platform and System Center Configuration Manager.

On the CIE-SRV-00 VM you can launch the ConfigMgr console from the pinned taskbar shortcut.

Drill down into the navigation through Software Library > Overview > Operating Systems in order to find the list of Task Sequences. Select the CIE 4.0 - on-premises client task sequence from the list and then click on Create Task Sequence Media from the toolbar.
Select the top option in order to create Stand-alone media before clicking Next.
Choose **CD/DVD set** and select **Unlimited** from the Media size: drop down menu before specifying the path and location for the media file that will be created by this wizard and then click **Next**.

Uncheck the box to **Protect media with a password** and then click **Next**. **Browse** for the **CIE 4.1 Windows 8 Client Image** (OR whichever other Task Sequence you desire) task sequence and then click **Next**.
With the `{\CIE-SRV-00.contoso.com}` Distribution Point selected click on the **Add** button in order to move it to the selected distribution points containing content required by the task sequence, and then click **Next**
Click **Next** to continue past the Customize the task sequence media screen and finally, click **Next** again order to begin creating the ISO file.
Let the wizard complete the ISO creation process which can take as long as 20 minutes to complete.

Once the ISO has been created you will need to copy it out of CIE-SRV-00 and onto the host machine (or some other physical PC on the network) and then decide whether you want to burn it to a Dual Layered DVD or write it to a USB thumb drive. If the ISO is not over the DL-DVD size limit then burning is fairly straightforward assuming you have a DL DVD burner and a blank DL-DVD disc, by right clicking on the ISO file and selecting **Burn disc image**. If you choose the later, then you can use a 3rd party tool like **ISOtoUSB** to burn the ISO to your thumb drive, similar to the process followed in the **Client imaging** page of the CIE for Office 365 section of this guide.
Create Windows To Go USB

If you plan to showcase Windows to go, then you will need to create a Windows To Go USB stick from one of the two certified USB thumb drives available at the time of the CIE 4.1 release; the Super Talent Express RC8 and the Kingston DataTraveler Ultimate.

Once you have obtained the certified drive, you can insert it into the USB 3.0 slot on one of the PCs running the CIE 4.1 client image and start search for Control Panel in order to find and launch the Windows To Go applet.

You should see the certified USB device listed (notice that the drive used below is 32GB, which is the minimum USB stick size for Windows To Go), and click Next to continue.
Click on Add search location and provide the path to the Install.WIM file located on the Windows 8 installation media you provide.
Skip the BitLocker password...
...and finally Create.
Once you have created your WTG USB stick, you can verify successful creation by plugging it into a USB 3.0 port on any PC you have available, booting directly from the USB stick where it will initialize for the first time.

![Create a Windows To Go workspace]

Ready to create your Windows To Go workspace

Your Windows To Go workspace will be created on Kingston DT Ultimate USB Device using Windows 8 Enterprise.

This might take a while. Don't remove the USB drive during this process.

⚠️ The USB drive will be reformatted and any data on it will be deleted. Before you continue, back up any data that you don't want to lose.
Adding Language packs


As for Windows 8, the recommended method for CIE 4.1 is to download the *mu_windows_8_language_pack_x86_dvd_917546.iso* file from either MSDN or TechNet. This will require logging into either your MSDN or TechNet account. Once downloaded, you can then mount that ISO to CIE-SRV-00. In order to make it available to the entire CONTOSO network domain, we will share the D: on CIE-SRV-00, by right clicking the newly mounted ISO in the D: hovering over Share with and then selecting Advanced sharing...

Select the Advanced Sharing... button.
Select the checkbox next to **Share this folder** and then select **OK**…

…and then **Close**.

Back on the Windows 8 client machine where you need to add the language type **lpksetup** at the Start Screen and select the result under **Apps**.
Select **Install display languages.**

**Browse** for the language pack folder that was downloaded and mounted on **CIE-SRV-00** and shared using \cie-srv-00\d\language\<language> and then select the checkbox next to the language before selecting **Next.**
Select **I accept the license terms** before then choosing the **Next** button.

Select **Close** once completed.
Back at the start screen, type `lang` and choose the **Settings** group of items to find **Add a language**.

Again select **Add a language**
Select the corresponding language that you just installed a moment ago, and then select **Open**.

If there are multiple regional variants of the language selected, choose the appropriate variant and then select **Add**.
Select **Options** next to the language that you are about to make the primary language...
...and then select **Make this the primary language**...

![Language options](image)

...before selecting **Log off now**.

![Change display language](image)

After logging back into Windows, you will be greeted with a newly localized Windows 8 Start Screen in the language of your choosing.
Setup Live IDs

Microsoft Live accounts and associated live tile apps:

Although not part of the all up story, you may choose to showcase the Windows 8 Mail, Calendar, People and/or SkyDrive apps from their live tiles on the Windows 8 start screen...

...then you should login using the same Windows Live account info that has been provisioned for the Windows Phone devices.
Excel 2013
Customizations and Add-ins

If you are working in Excel 2013 and need to enable the horizontal or vertical scroll bars, go to File > Options > Advanced and scroll to the Display Options for this Workbook section to

Enable PowerPivot in Excel to allow a deeper analysis of the data. While in Excel 2013, click File then Options
Then select **Add-Ins**

In the Manage Add-ins Drop Down list, select **COM Add-ins** and click **Go ...**
Check the box next to Microsoft Office PowerPivot for Excel 2013 and click OK.
Room setup

The following instructions may be used as guidance in ensuring the room is setup correctly.

1. You will need to have all of your client PCs devices connected either to the switch via CAT 5e cable or over a WiFi connection to the Internet. Each PC should have a mouse, webcam, and headset plugged in with all PCs powered on.

2. Any Windows Phones should be on and charging.

3. If you plan to utilize the Roundtable, a projector, or a Wireless Display adapter device during the session, those should be plugged into the facilitator’s laptop.
System accounts and passwords

**Windows Client Desktop Images (Local Administrator)**
- User: \CIE
- Password: pass@word1

**SharePoint Server**
- User: Administrator
- Password: pass@word1

**Domain Administrator**
- User: Administrator
- Password: pass@word1
Known Issues
Currently, the CIE 4.1 environment does not support connecting the Lync 2010 Windows phone app on Windows Phone 8 devices. We do support the Lync 2010 app on Windows Phone 7.5 devices.
Questions & Support
Support Information

General questions about CIE:
Contact thecie@microsoft.com

Technical questions around CIE:
Contact support@microsoftcie.com

Visit www.microsoftcie.com

When contacting support, check the version number on your CIE environment by following the instructions below. Versions prior to 3.5 will not be supported and it will be necessary for you to download the latest version prior to contacting support.

The icon below can be found on any of the Virtual Machines' desktops. Double click this icon to run the CIE Server Validation Utility.

If you are not on the latest version (4.1) once the tool completes running, you will see a screen that looks like the below. Clicking on the version number will take you to the website where you can download the latest CIE environment.