



# Deployment

27 Apr 2024



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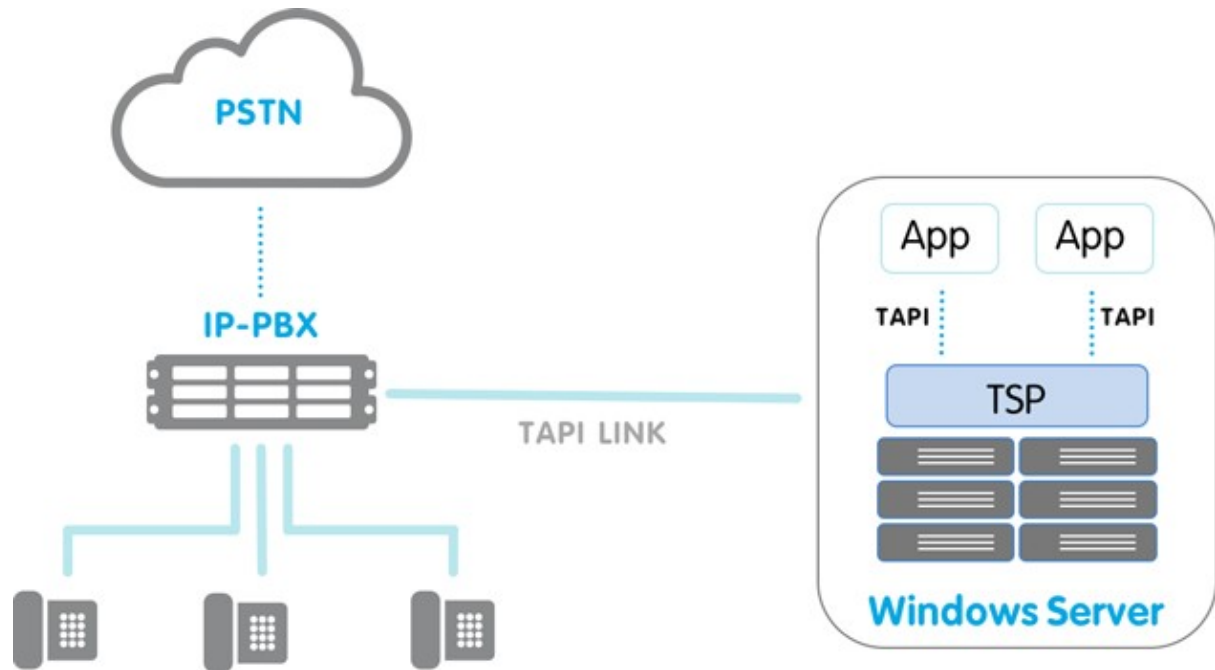
## Deployment

### CTI, TAPI and TSP

The TSP (Telephony Service Provider) is an interface between the PBX and the Windows Operating System. Once installed, it works as a system driver which interacts with the PBX through TCP and allows making calls, monitoring and controlling IP phones. This is also known as CTI (Computer Telephony Integration).

On the Windows platform, applications interact with the TSP through TAPI (Telephony Application Programmers Interface).

Some Imagicle Applications need a TSP installed on the same server on which they run.



CTI configuration is usually accomplished in these steps:

- Device association: work on the PBX to create a list of devices to be controlled through TAPI
- TSP Installation: download and configure a solution specific driver

The following Imagicle applications require a TSP to be correctly installed and configured on the server:

- Queue Manager Enterprise
- StoneLock
- Budget Control
- Blue's Attendant Server / CTI server (covers Blue's Attendant Professional and Enterprise editions, Blue's One Enterprise)

You can find the detailed setup procedures under each application section.

**Note:** CTI integration is not natively available for the CuCME telephony platform. For that platform, a CSTA driver is available on project basis. Please contact Imagicle for more information.

## Installing Cisco TSP

This procedure describes how to install the Cisco Unified CallManager TSP (Telephony Service Provider) on the Application Suite server.

### Create an application user and associate devices

The user needs administrative privileges. For detailed information on how to associate the devices to this user and which IP phones to associate, please refer to the PBX setup section of the application you are configuring.

Note: You can create the Application User later as long as you use the same credentials.

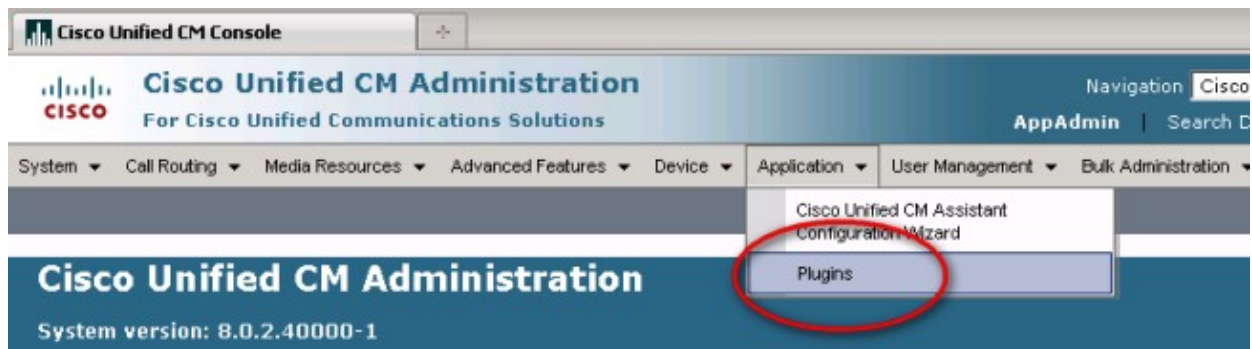
### Download the package

Log onto the Windows server.

Open the following URL to download the Cisco TSP Plugin from a CUCM node:

- **TSP @64 bit:** <https://<CUCM IP>/plugins/CiscoTSPx64.exe>
- **TSP @32 bit (obsolete):** <https://<CUCM>/plugins/CiscoTSP.exe>

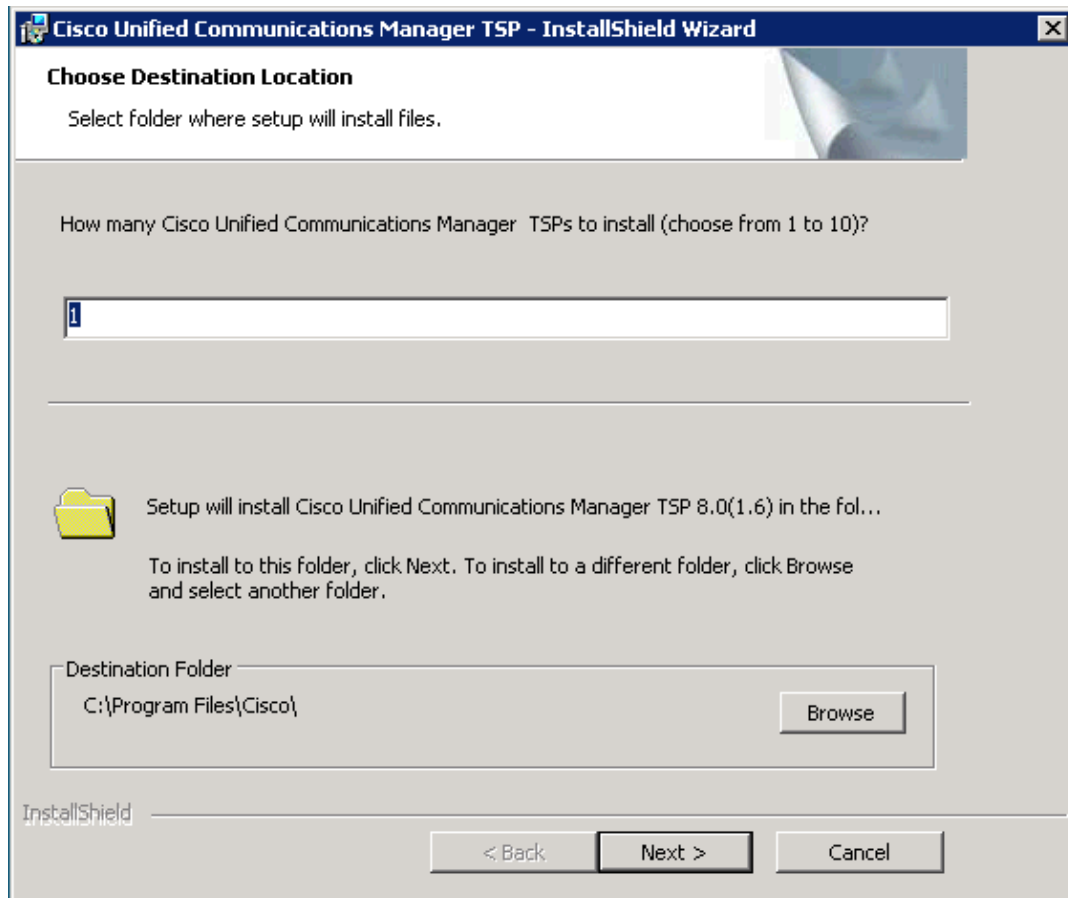
Alternatively, login the CUCM Web interface as admin and select "plugins" from the Application Menu.



Select the "installation" plugin type and press Find. Locate the "Cisco Telephony Service Provider" plugin and press **Download** on the proper version (32/64 bit) according with the Windows Server architecture you're going to install on:

<a href="#">Windows</a>	Unified Communications Manager via JTAPI. JTAPI libraries, re
<a href="#">Download</a> <a href="#">Cisco TAPI 32-bit Client</a>	TAPI provides a standard programming interface for communic
<a href="#">Download</a> <a href="#">Cisco TAPI 64-bit Client</a>	TAPI provides a standard programming interface for communic

Save the **CiscoTSP.exe** file to the windows server and double click on it to launch it.



During installation, enter the CallManager IP address in the CTI Manager field, and the credentials of the Imagicle CTI user (e.g. **ImagicleCTI/ImagicleCTI**). If you have a CallManager cluster, usually you have to enter the IP address of the Publisher.

**Cisco Unified Communications Manager TSP - InstallShield Wizard**

**Configure TSP Instance: CiscoTSP001.tsp**

Userid:

Password:

Verify Password:

CTI Manager 1:

CTI Manager 2:

InstallShield

Select Cisco Wave Drivers installation, even if they are not required by Imagicle applications.

Cisco Unified Communications Manager TSP - InstallShield Wizard

MediaDriver/AutoUpgrade/TFTP Server IP Address

Choose Driver

- ☒ Use Cisco Wave Driver (Requires manual configuration)
- ☐ Use New Cisco Media Driver

Auto-Upgrade Options

- ☒ ASK
- ☐ ALWAYS
- ☐ NEVER

☐ Non-Administrative Users to manage their UserID/Password credentials

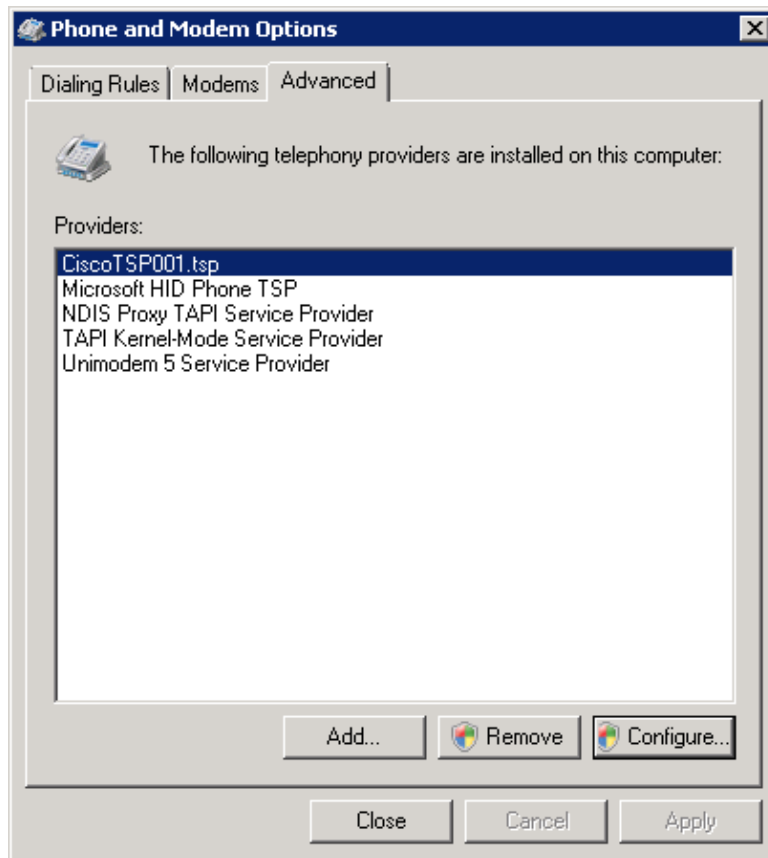
☒ Start Cisco TSP Notifier when Windows starts (Recommended)

Multi-Language Settings:  
Configure the TFTP server IP address where language files are located.  
TFTP server IP Address

InstallShield

< Back
Next >
Cancel

After installation, you can edit the TSP configuration through the Control Panel, Phone and Modem Options, under the Advanced Tab, selecting it from the list and pressing the **Configure** button.



**Warning:** whenever you upgrade your CuCM it is **MANDATORY** to upgrade the TSP installed on the Application Suite server too. After CuCM installation, download the new package and run it on the server.



## Operating System Updates and Server migration (how to move Application Suite in a new server)

If your Imagicle Application Suite is installed into an actual/virtual server equipped with an outdated OS version (like Windows Server 2008 or 2012), you might need to update the operating system to a recent Windows Server 2016/2019/2022.

You can't simply perform the Windows Server update procedure on top of your existing installation, because this is going to change several system files and eventually corrupt Imagicle Suite installation and relevant licenses.

The correct procedure for Windows operating system update implies deploying a **new server from scratch, with new OS, in place update is not allow**.

### Update procedure

The update to a new Windows Server OS version is accomplished through the following steps:

- if Imagicle installation is **stand-alone** (only one independent machine):
  - ◆ if the new server is going to have the **same IP** of the old one:
    - ◇ deploy a new server, with an Imagicle Suite version equal or greater than the old server: you can follow our guide [here](#), in case of a new actual server appliance. Otherwise, if you have a virtualized environment, you can deploy a new VM by following our guide [here](#)
    - ◇ assign a temporary IP to the new Imagicle server
    - ◇ if required, remember to install also the Cisco TSP plugin and to configure it, you can follow our guide [here](#)
    - ◇ stop all Imagicle services on old Imagicle server
    - ◇ perform a backup of the old Imagicle installation, with the [Backup and Restore tool](#)\*
    - ◇ copy the backup on the new Imagicle installation
    - ◇ take note of old Imagicle server's IP address and then shut it down
    - ◇ change IP address on new Imagicle server's network card to above noted IP
    - ◇ perform a restore on new Imagicle installation, with the [Backup and Restore tool](#)
    - ◇ verify that all data have been moved to new Imagicle server
    - ◇ re-activate your Imagicle licenses on new appliance, from [Imagicle activation portal](#)
    - ◇ reboot new Imagicle server
    - ◇ end
  - ◆ if the new server is going to have a **different IP**:
    - ◇ deploy a new server, with an Imagicle Suite version equal or greater than the old server: you can follow our guide [here](#), in case of a new actual server appliance. Otherwise, if you have a virtualized environment, you can deploy a new VM by following our guide [here](#)
    - ◇ assign the IP to the new Imagicle server
    - ◇ if required, remember to install also the Cisco TSP plugin and to configure it, you can follow our guide [here](#)
    - ◇ stop all Imagicle services on old Imagicle server
    - ◇ perform a backup of the old Imagicle installation, with the [Backup and Restore tool](#)\*
    - ◇ copy the backup on the new Imagicle installation
    - ◇ perform a restore on new Imagicle installation, with the [Backup and Restore tool](#)
    - ◇ verify that all data have been moved to new Imagicle server
    - ◇ re-activate your Imagicle licenses on new appliance, from [Imagicle activation portal](#)
    - ◇ reboot new Imagicle server
    - ◇ update the new Imagicle server's IP accordingly, where it is required (e.g. PBX, Attendant Console clients, etc.)
    - ◇ end
- if Imagicle installation is a **cluster** (set of two or more Imagicle installations that have been configured to work together):
  - ◆ **⚠** if the new servers are going to have the **same IP** of the old ones:
    - ◇ deploy the new servers, with an Imagicle Suite version equal or greater than the old servers: you can follow our guide [here](#), in case of a new actual server appliance. Otherwise, if you have a virtualized environment, you can deploy a new VM by following our guide [here](#)
    - ◇ assign temporary IPs to all new Imagicle servers
    - ◇ [don't create the cluster at this point](#)
    - ◇ if required, remember to install also the Cisco TSP plugin on all servers and to configure it, you can follow our guide [here](#)

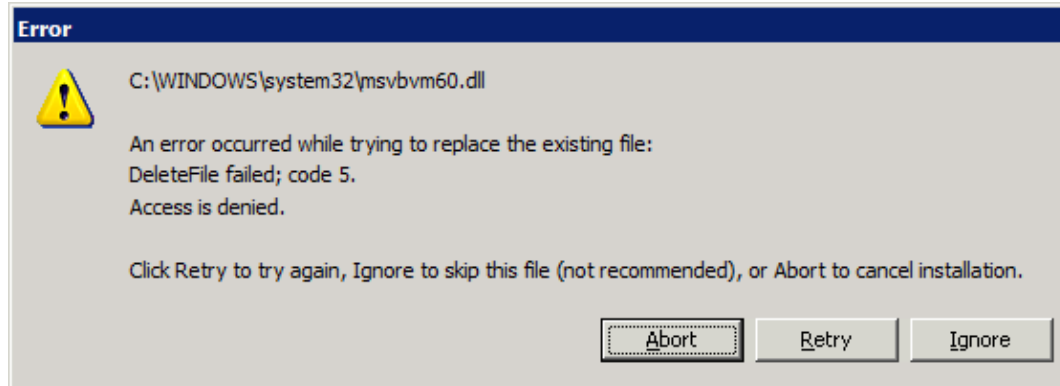
- ◇ stop all Imagicle services on old Imagicle primary node server
- ◇ perform a backup of the old Imagicle primary node installation, with the [Backup and Restore tool](#)\*
- ◇ copy the backup on the new Imagicle primary node installation
- ◇ take note of old Imagicle servers' IP addresses and then shut them down
- ◇ change IP addresses on new Imagicle servers' network cards to above noted IPs
- ◇ perform a restore on the new Imagicle primary node installation, with the [Backup and Restore tool](#)
- ◇ verify that all data have been moved to new Imagicle primary node server
- ◇ re-activate your Imagicle licenses on all new Imagicle appliances, from [Imagicle activation portal](#)
- ◇ reboot new Imagicle primary node server
- ◇ create the new cluster, following the guide [here](#)
- ◇ end
- ◆ if the new servers are going to have **different IPs**:
  - ◇ deploy the new servers, with an Imagicle Suite version equal or greater than the old servers: you can follow our guide [here](#), in case of a new actual server appliance. Otherwise, if you have a virtualized environment, you can deploy a new VM by following our guide [here](#)
  - ◇ assign IPs to all new Imagicle servers
  - ◇ don't create the cluster at this point
  - ◇ if required, remember to install also the Cisco TSP plugin on all servers and to configure it, you can follow our guide [here](#)
  - ◇ stop all Imagicle services on old Imagicle primary node server
  - ◇ perform a backup of the old Imagicle primary node installation, with the [Backup and Restore tool](#)\*
  - ◇ copy the backup on the new Imagicle primary node installation
  - ◇ perform a restore on the new Imagicle primary node installation, with the [Backup and Restore tool](#)
  - ◇ verify that all data have been moved to new Imagicle primary node server
  - ◇ re-activate your Imagicle licenses on all new Imagicle appliances, from [Imagicle activation portal](#)
  - ◇ reboot new Imagicle primary node server
  - ◇ create the new cluster, following the guide [here](#)
  - ◇ update the new Imagicle servers' IPs accordingly, where it is required (e.g. PBX, Attendant Console clients, etc.)
  - ◇ end

\* Backups are forward - compatible since Imagicle 2012.2.1 release. E.g. if you have the backup of a 2012.2.1 configuration, you will be able to restore it over a new 2020.1.1 installation. If you have older Imagicle versions, please contact Imagicle Tech Support for additional details.

## Installation Troubleshooting

### Error Copying Files

Should a message similar to this one pop up:

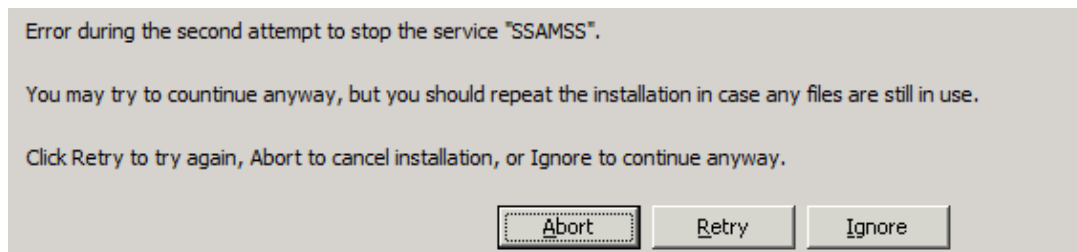


to correctly install the Application Suite, try the following solutions in order:

1. Close all the other running applications and click *Retry*.
2. Use the Task Manager to terminate the running Imagicle processes (if any) and click *Retry*.
3. If the filename is msvbvm60.dll, you may click *Ignore*. For other files, you should click *Abort*.

### Error Stopping Services

The following message box may be displayed before the file copy step of the installation:



This error is common when a Imagicle service is partially uninstalled, either because the uninstall program was interrupted or because the system was not restarted after uninstallation. To correctly install the Application Suite, try the following solutions in order:

1. Run iisreset
2. Stop IIS from the IIS Manager (remember to restart it when the installation is completed)
3. In Windows Service Manager, check that all the Imagicle services are stopped
4. Reboot the machine and repeat the installation.
5. Click *Ignore*. In this case, some files may still be in use. See also Error Copying Files.

### Error Running the Backup Utility

The following message box may be displayed when you click the *Run Backup Utility Now* button of the *Backup Data* wizard page:

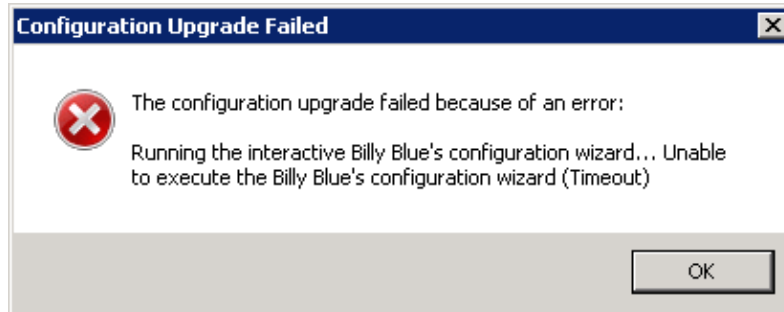
Unable to execute the Stonevoice Backup Utility: The directory name is invalid.

OK

This error may appear if your home directory is on a network drive that is not accessible. If this message appears, launch the *Backup and Restore* utility from the Start Menu.

## Database Creation Timeout

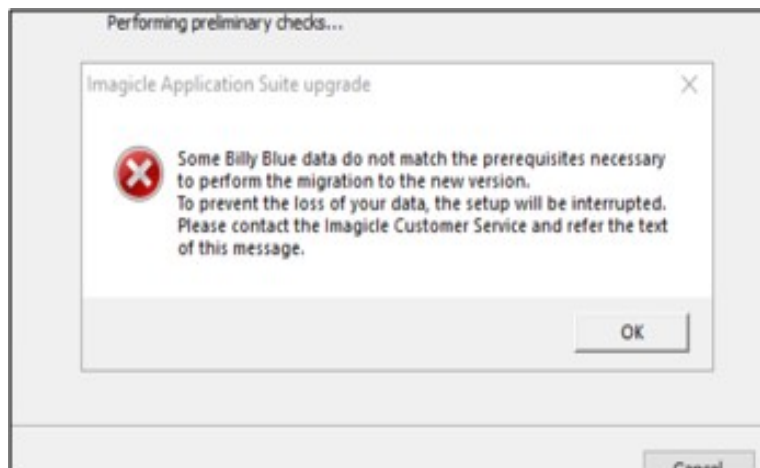
This message might appear on slow systems, if certain phases take too long to complete:



To recover wait for the User Synchronization to complete, press **OK**, then press **Retry**, then configure the database with the same credentials pressing **Next** twice.

## Failure during billing data migration, while upgrading to 2020.Spring.1 release or newer

While upgrading IAS from 2020.Winter.1 or older to 2020.Spring.1 or newer, a billing data migration to a new SQL data warehouse is automatically triggered. If, during the migration, the routine encounters spurious records in "Chiamate" and "ChiamateInterne" DB tables, the process is stopped with the following message:



Please contact Imagicle Support for details about solving this issue.

## Installation log files

The installation program creates a log file during setup. It can be useful to tell if all the files were correctly copied, ole dll registered, services installed...

The file location on Windows 2008 is:

C:\Users\<username>\AppData\Local\Temp\2

where username is the account which started the setup program.

The log file names are like this "Setup Log <current date> #001.txt". E.g.:

Setup Log 2011-01-21 #001.txt

Setup Log 2011-01-21 #002.txt

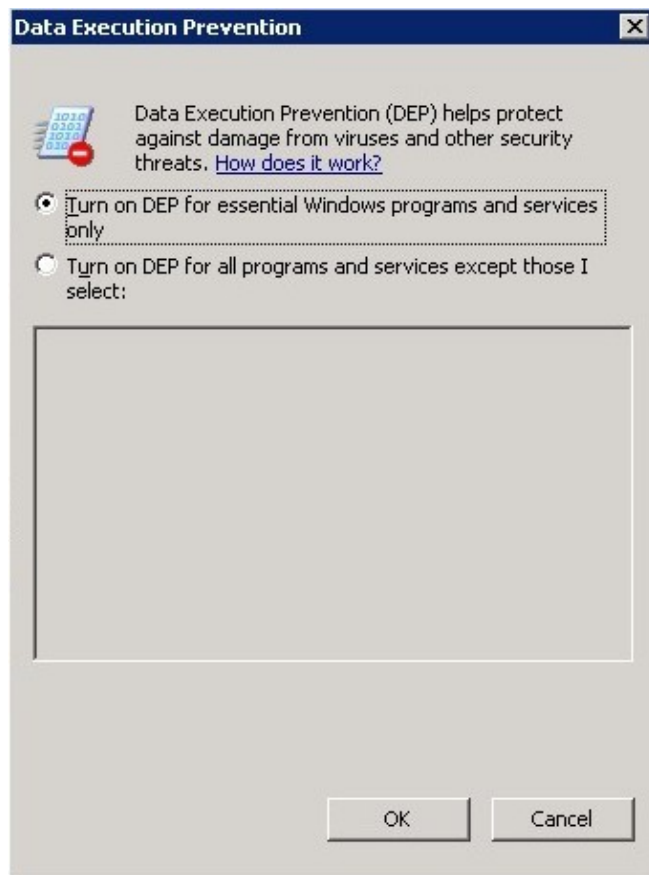
....

Analysing log files is a complex task which may be delegated to Imagicle Technical Support Team.

## Problem with data execution prevention

If this message is displayed on the server, please check that Data execution prevention is disabled.





## Imagicle UC Suite Updates

Upgrading to the latest version requires: performing a full backup, installing the latest installation package over the existing installation, and checking the configuration. Detailed procedures follow. Before updating, please ensure you have downloaded the right package and that it is covered by a maintenance agreement (see below).

### Version Numbers and Version Compatibility

The UC Suite has a main version number that applies to the whole installation package.

The version number is the one you may find in the filename of the installation package. It is composed by four parts: Major Version, Release season, Build and Hotfix.

For instance, version **2020.1.1.h2** means **UC Suite version 2020 Winter build #1, hotfix 2**.

You may always upgrade to the latest version, even when Major version is not the same. E.g. you can install 2020.3.1 over 2015.1.1. In any case, all the applications are backwards compatible.

**Imagicle requires the specific applications being upgraded to be covered by a Maintenance Agreement.** Please refer to the official [website](#) for more information about available ImagicleCare plans.

**IMPORTANT:** Starting from Imagicle 2023.Spring.1 release, MS-SQL Server 2008/2008R2 is supported only for updating an existing installation to Spring 2023, but you can't deploy a new Imagicle instance with such old MS-SQL version. Starting from 2023.Summer.1 release, MS-SQL 2008/2008R2 is not supported anymore and therefore a MS-SQL update is mandatory.

### Update procedure

To update an existing installation to the latest build:

- Perform a Backup with the Backup and Restore tool
- Install the new package over the existing one, on the same machine
- Choose the same installation folder
- Reboot the server

Upgrading Imagicle Call Analytics also requires to fully run the Configuration Wizard to the last step.

Cluster installations require a slightly different procedure, detailed in the High Availability section.

### Upgrading Digital Fax to version 2012.12.x or later from a previous version

Upgrading Digital Fax will cause all the faxes to disappear from the user's Inbox and Outbox. This is because they are now managed through a different process. To make old faxes available to the users, go to the Digital Fax Manage Service web page and click on the "Import Old Faxes" button. If there is no such button, no fax needs to be imported. Before importing the faxes, please make sure the user's list is correctly configured.

### Upgrading from a Stonevoice Application Suite for CallManager Express

The CME suite no longer exists and has been replaced by the generic Imagicle UC Suite for Cisco UC. You can upgrade your Stonevoice Application Suite for CallManager Express to this edition being aware that:

1. SSAM Professional will be replaced by the VoiceMail. The upgrade does not require reconfiguration, except for the MWI pattern on CME. Please check the relevant section of this guide for details
2. Call Analytics does not require reconfiguration
3. Digital Fax does not require reconfiguration
4. Speedy, will be replaced by Contact Manager. The upgrade does not require reconfiguration
5. IVR Manager will be replaced by the IVR Manager 4 gateways. The upgrade does not require reconfiguration

6. Concerto is no longer available in the new suite, upgrading *will result in the program being removed from your system*
7. Queue Manager Professional will be replaced by the more powerful Advanced Queuing with 4 channels, but will require a full reconfiguration.

After upgrading, you need to re-activate the license of every application you were using: you can get a new license at no additional cost for each application you have a **valid maintenance contract** for. Please contact imagicle Sales Team ([sales@imagicle.com](mailto:sales@imagicle.com)) to renew or learn more.

If you are still running the old Billy, please contact imagicle sales to purchase the upgrade to Call Analytics.

If you don't want to go through the upgrade process, the latest downloadable version of Imagicle Application Suite for CME is Spring 2013 (2013.3.3). Please check [www.imagicle.com/go/eol](http://www.imagicle.com/go/eol) for end of support info.

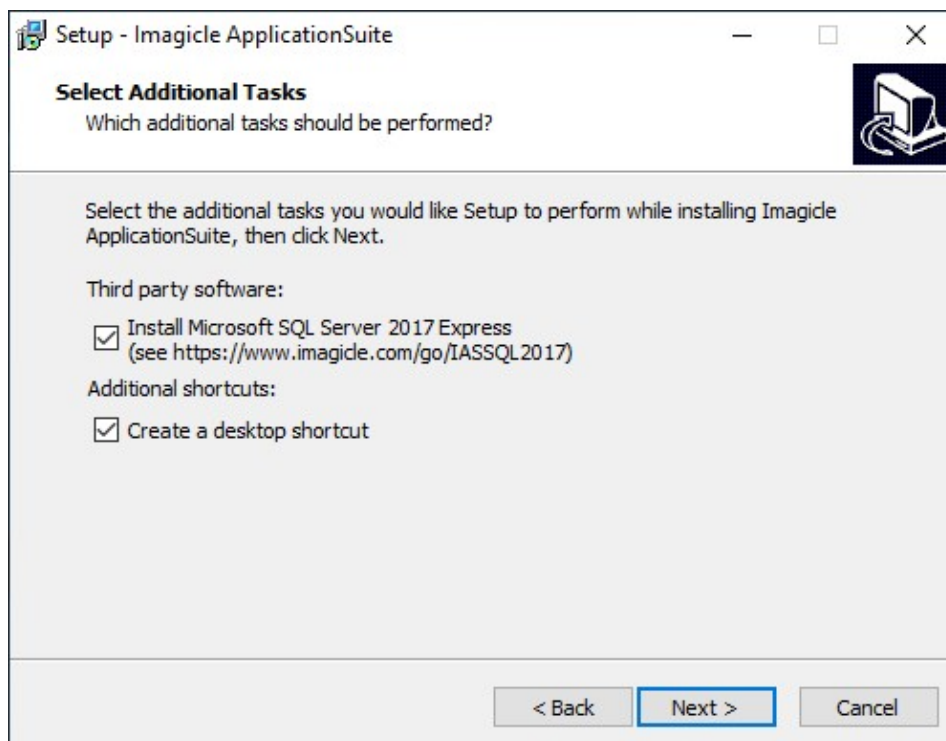
## Special recommendations when upgrading to 2020.Spring.1 release or above

### SQL Server Express instance update

When upgrading from release 2020.Winter.1 or older to 2020.Spring.1 or above, setup package prompts you to install a local MS-SQL Server 2017 Express Edition instance, if not yet available. This is highly recommended, because SQL Server 2008 Express is no longer compatible with most recent Windows Server OS versions. You can accept the installation or you can keep existing internal/external SQL Server instance by unchecking relevant SQL install option.

**IMPORTANT:** Starting from Imagicle 2023.Spring.1 release, MS-SQL Server Express/Standard update is MANDATORY, because MS-SQL 2008/2008R2 is temporarily supported for updating an existing installation only. Starting from 2023.Summer.1 release, MS-SQL 2008/2008R2 is not supported anymore!

See below screenshot:



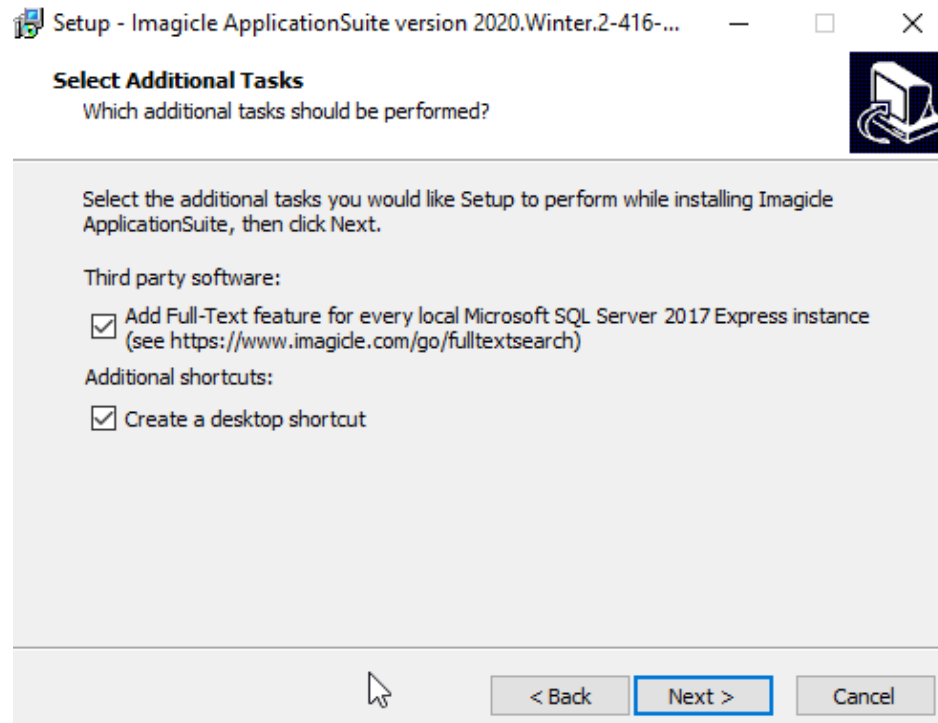
If new SQL Server 2017 installation is chosen, please keep in mind that Imagicle UC Suite keeps using the old SQL 2008 instance. See [here](#) how to move data from old to new SQL instance. You can do that later, at the end of update wizard.

### SQL Server Full-Text Search service



## imagicle

If a local MS-SQL Server 2017 Express Edition instance is already installed in your UC Suite, and it does not include Full-Text Search service, you have the possibility (mandatory from Spring 2021 and above) to add this very important indexing service, which allows a much quicker contact search across multiple Contact Manager directories, even involving millions of contact, without having to wait several seconds to get a response. In this case, the following window appears:



### Database check

Going forward with update wizard, depending on starting Imagicle release, it might be requested to perform several server reboots, to allow the installation of additional Microsoft components. Always reboot as required.

During setup wizard, you will be prompted to check SQL instance configuration. Just confirm existing parameters by click Next. See below screenshot sample:

**Billy Blue's setup wizard**

**Connecting to the SQL Server**  
Enter the data to access Microsoft SQL Server version 2008 (10.x) or higher.

SQL Server location:

☒ On this computer

☐ On another computer (hostname or IP address):

SQL Server Instance name (if exists):

Database name:

☐ Use secure connection

Authentication:

User name:

Password:

## Installing SQL Full-Text Search service

If a local SQL Server 2017 Express instance is already installed and "Full-Text search" feature is not available yet (Spring 2020 release or above), you are prompted to perform the installation of this feature. See below screenshot:

**Billy Blue's setup wizard**

**Database optional features**  
Additional features that can enhance ApplicationSuite's performance

☒ Enable Full-Text search on the selected database "IAS".  
This option requires additional database space. [Learn more about occupation.](#)

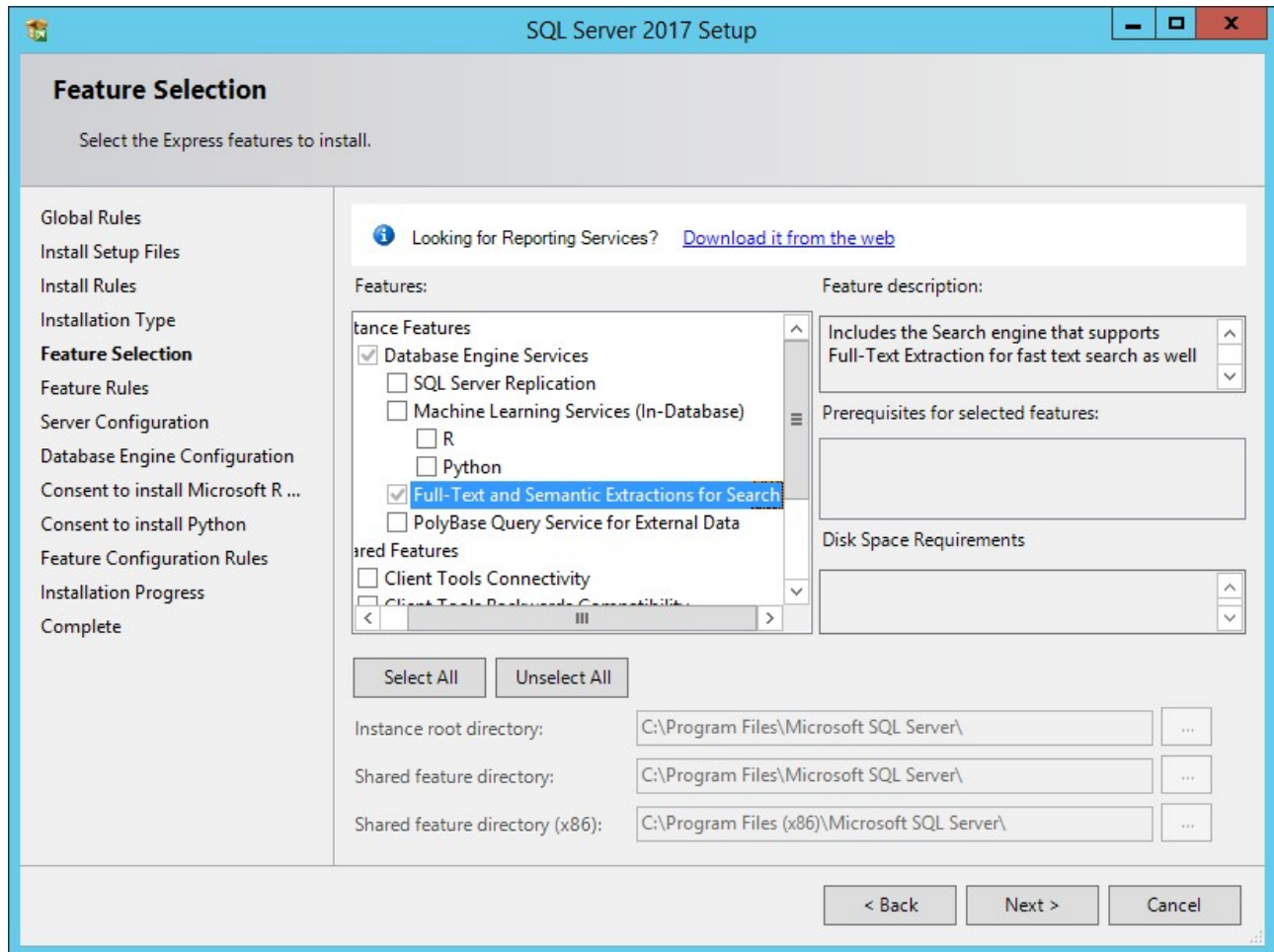
By choosing this option you are starting to enhance the performance of your contact search system.

This Feature, implemented since Spring.2020.1 release, allows to speed-up contacts search across millions of entries included into Contact Manager directories.

## Manual installation of Full-Text Search service on SQL Server versions other than 2017

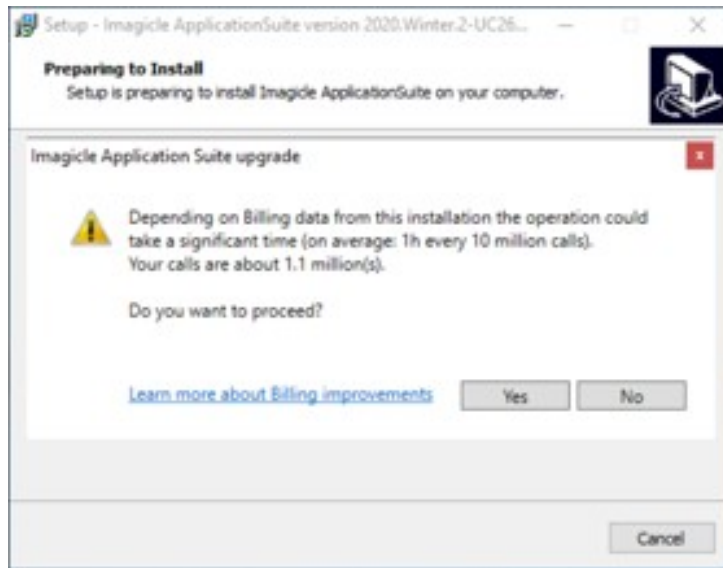
When local SQL server version is different than 2017 Express or you are dealing with an external SQL Server instance, you can manually install the Full-Text service.

To add Full-Text Search feature into your existing SQL instance, you must run SQL Server installer, paying attention to use "Express Advanced" package and not "Express Core" package (only in case of SQL Server Express). Please add **Full-Text and Semantic Extractions for Search** feature to chosen instance. See below sample:



## Billing data migration

When upgrading from release 2020.Winter.1 or older to 2020.Spring.1 or above, setup package automatically migrates all billing data from old to new data warehouse within SQL database. For this reason, you get a message about possible delays in migrating CDRs. See below:



When an Imagicle cluster with replicated DB is in place, above migration is performed in master node only (regardless the order nodes are updated), so above message is not displayed in subsequent nodes. When using a shared DB, migration happens during first node update.

## **Required Migration Time**

Please see below table to get an idea of required time for migrating call accounting data to new data warehouse:

<b>Migration Time</b>	<b>Sample #1: ~38M calls</b>	<b>Sample #2: ~1M calls</b>
Data shrink	00:10:00	00:00:17
Time to populate Call Analytics tables	01:30:00	00:00:13
Index creation	00:20:00	00:00:12
<b>Total</b>	<b>~02:00:00</b>	<b>00:02:36</b>

Please be aware that migration process temporarily stops call accounting data acquisition. Once migration is accomplished, data acquisition automatically restarts and all buffered CDRs are processed without any data loss.

## **Call Analytics DB usage**

<b>Call Accounting data occupancy</b>	<b>Sample #1</b>	<b>Sample #2</b>
Before migration	~58 GB	~2 GB
After migration	~20 GB	~1 GB
<b>Occupancy Reduction</b>	<b>-65%</b>	<b>-50%</b>

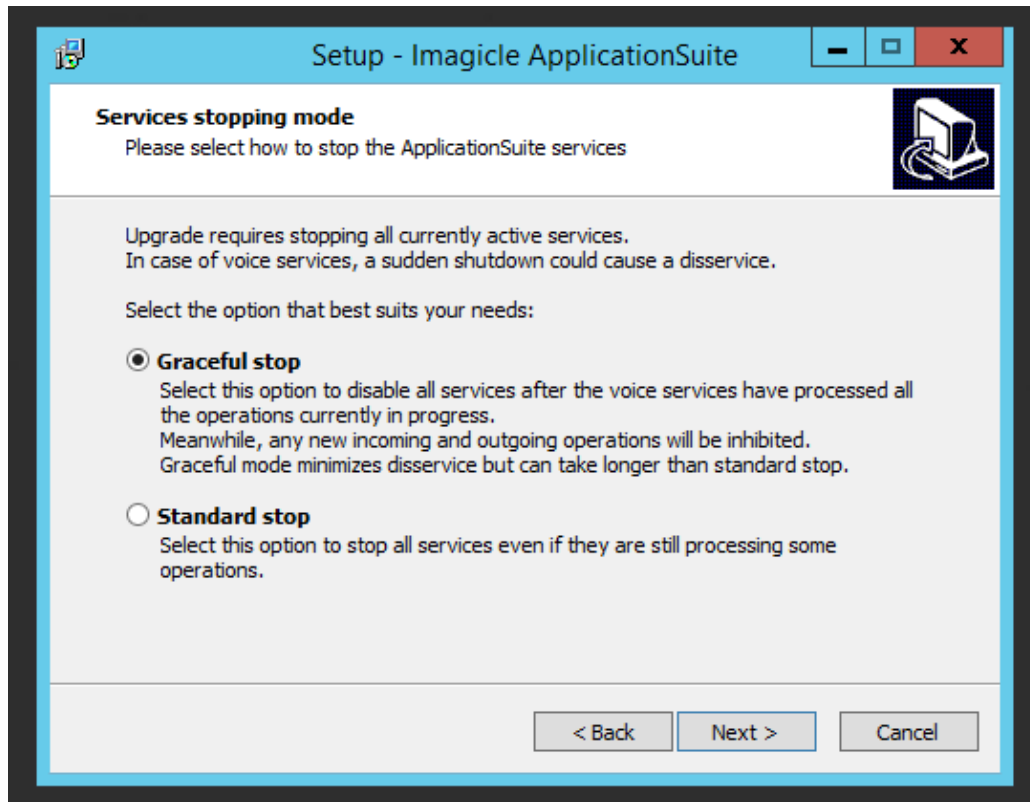
## **Performances Increase after migration**

Call Analytics data migration not only optimizes database usage: it also enhance user's experience while accessing to Call Analytics web portal to retrieve call accounting data.

Required time to display Home page, Report filters panel and reports execution are substantially reduced on an average of 50% less and even more.

## **Special recommendations when upgrading to 2021.Winter.1 release or above**

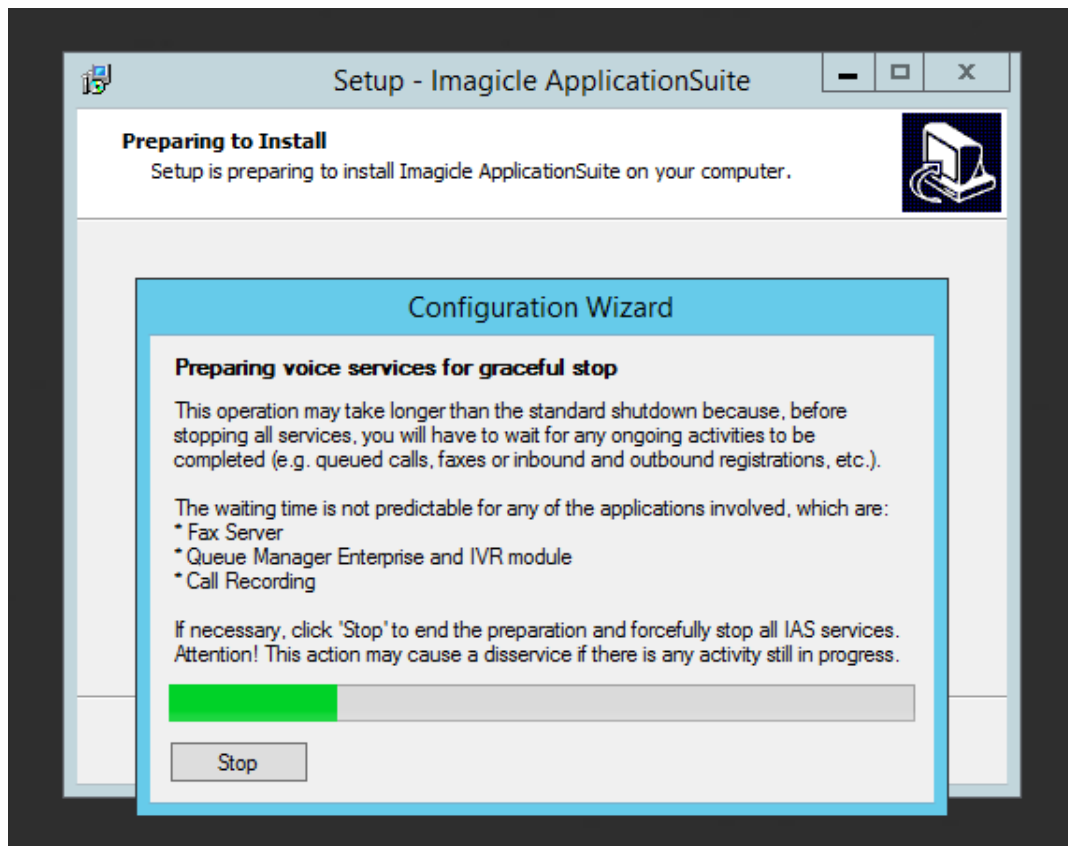
While updating an Imagicle UC Suite from 2020.Summer.2 or above, to 2021.Winter.1 release or above, you are prompted to choose how to turn off Imagicle services:



If "Standard stop" option is chosen, Imagicle services are suddenly stopped as usual, without caring about ongoing calls, fax, recordings.

If "Graceful Stop" option is chosen (default), Imagicle services are stopped when all ongoing calls are accomplished.

Once the installation process starts, a new window pops-up, informing that you need to wait for all calls to be accomplished. If you don't want to wait a long time, you can still decide to force Imagicle services to stop, by hitting relevant button:



While waiting for all calls to be completed, all new inbound/outbound calls are rejected by the node subjected to update. Other HA nodes, if included in an Imagicle cluster, can still handle calls.

Once graceful stop process is over (or after having hitted "Stop" button), UC Suite update proceeds with all usual steps.

## Repairing an existing installation

To repair an existing installation, install the same package (i.e. same version number) over the existing one just like in the case of a minor upgrade.

## Repairing Digital Fax installation

During the update, the Setup program could ask you if you want to repair the existing *Digital Fax* installation. This means creating the virtual serial ports and the virtual modems again.

If *Digital Fax* is already correctly installed and running, **do not select the repair option**. Repairing a working installation may cause problems and need an actual repair later.

## Changing the default language

To change the default language for the UC Suite, perform a Repair Installation and make a different choice.

The default language affects the web interface, the Attendant Console interface and the audio files of the users for whom the "user language" field in the User Management is blank.

Note - Users' welcome messages for the *VoiceMail* application will remain in the old language even if installing a complete UC Suite package in a different language.

## License status and configuration after the update

Once an application is registered on a machine, the registration is persistent among different versions even after uninstalling and reinstallation. There is no need to register again if you perform an upgrade of the UC Suite package on the same machine.

Imagicle might releases new applications when a new UC Suite package is issued. New applications might **replace** the old ones. Old applications may also be **discontinued** but not replaced.

On the technical side, an application is considered **new** when it has brand new features which dramatically improve the user experience. On the commercial side, a new application has a different commercial code and different license string or activation token. New and replaced applications require a new license.

## Deployment Options

You can freely download the Application Suite from Imagicle web site. The creation of an account with a valid email address might be required.

There are two deployment options:

1. Through Imagicle Virtual Appliance, which is easier and faster
2. Downloading the setup package and installing it on a Windows server

Both the Virtual appliance and the Setup package include SQL Server Express edition, which is free and suitable for small and medium business deployments. To deploy using an external SQL server database, see below.

### Deploying ApplicationSuite through Virtual Appliance

The Imagicle Virtual Appliance (VAI) is a fully functional and ready-to-go **VMware** OVA including both Windows Server 2019 Standard or Windows Server 2012 R2 Standard OS and Imagicle ApplicationSuite, together with MS-SQL Server 2017 Express Edition.

Windows OS runs in evaluation mode for 180 days. A suitable Windows Server license, not provided by Imagicle, must be bought and activated on the server within that time.

To setup the VAI, follow these steps:

- Download the OVA file (approx. 15 GBytes)
- Deploy it on the VMware host. The procedure depends on the VMware version you are using. Please refer to VMware documentation.
- When you deploy the OVA, VMware will ask you to accept VMware Eula
- If you are running an ESX environment, you'll be asked which **preset profile** you want to use for the virtual machine (see below)
- Once deployment is over, before boot up the server, please save the VM as a template. This allows you to easily deploy another Imagicle VM in few minutes, including full 30 days evaluation period.
- Start the VM
- Windows first time bootstrap prompts you to choose the OS language, time zone and keyboard setting. Please note that if you want to run Imagicle Application Suite with Arabic interface, you have to select the English language.
- You are subsequently logged in as "**Administrator**" user (Local Administrator). The password is "**ImagicleVAI**".
- A welcome web page tells you what to do next, then you'll be redirected to the web administration login page
- Check that VMware Tools notification icon appears on bottom-right of your screen (taskbar). If outdated, please update it from your virtualization console.

All Imagicle applications run with full features for 30 days.

After the VAI deployment, you must go through the AppSuite common configuration steps, then configure the single applications, as described in the product configuration guides.

**Note:** If you plan to use your own MS-SQL Server installation and license, co-located inside Imagicle UC Suite VM, please make sure to install it AFTER Imagicle UC Suite deployment.

### Imagicle OVA profiles

Note: preset profiles do not apply to a deployment within VMware Workstation.

### AX Server

- Imagicle VAI configuration that supports up to 3 Apps (Medium business)
- Imagicle VAI configuration that supports up to 5 Apps (Small business)

Details:





- CPU: 2 vCPU (1 socket with 2 cores) with 2.5Ghz reservation
- Memory: 6.0 GB with 6.0 GB reservation
- Disk: 1 - 80 GB disk

## **BX Server**

- Imagicle VAI configuration that supports up to 3 Apps (Large business)
- Imagicle VAI configuration that supports up to 5 Apps (Medium business)
- Imagicle VAI configuration that supports up to 7 Apps (Small business)

Details:

- CPU: 4 vCPU (1 socket with 4 cores) with 4.8 GHz reservation
- Memory: 8.0 GB with 8.0 GB reservation
- Disk: 1 - 80 GB disk

## **CX Server**

- Imagicle VAI configuration that supports up to 5 Apps (Large business)
- Imagicle VAI configuration that supports up to 7 Apps (Medium business)
- Imagicle VAI configuration that supports up to 11 Apps (Small business)

Details:

- CPU: 6 vCPU (1 socket with 6 cores) with 6.9 GHz reservation
- Memory: 12.0 GB with 12.0 GB reservation
- Disk: 1 - 120 GB disk

## **DX Server**

- Imagicle VAI configuration that supports up to 7 Apps (Large business)
- Imagicle VAI configuration that supports up to 11 Apps (Medium business)

Details:

- CPU: 8 vCPU (2 sockets with 4 cores each one) with 8.9 GHz reservation
- Memory: 16.0 GB with 16.0 GB reservation
- Disk: 1 - 120 GB disk

## **Deploying ApplicationSuite through the Setup Package**

Download the latest package released for your telephony system from Imagicle web site, and run the installer.

**Note:** Please remember that current supported Microsoft operating systems are: Windows Server 2022-2019-2016-2012 Standard/Data Center/Essentials Edition.

## **Setup Wizard Details**

This section describes the operations performed by the setup utility and the information you'll be asked.

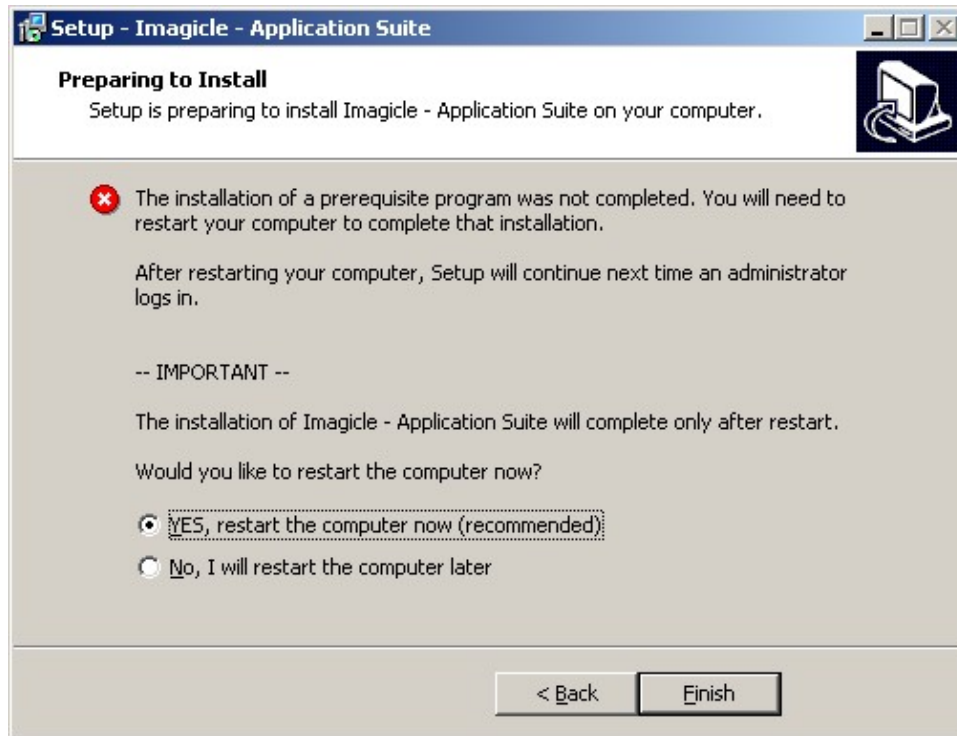
Network installation is supported, meaning that you can execute the setup program from a network share.

When the package starts, you are prompted to choose a language. The language of the Setup user interface is always English. The language selection dictates default web portal language.

## Prerequisites Verification and Installation

The operating system requirements and prerequisites verification is automatically executed before the main installation wizard starts. Compatibility with other Imagicle Products installed on the machine is also checked. Should a requirement fail, the setup package will try to install it automatically.

**Warning:** please reboot the server each time the setup asks you to do so!



## License Agreement

You are required to accept the terms of the License Agreement to install the Application Suite. The main License Agreement for the package covers the entire IAS version being installed.

## Information about Antiviral Software

If an antivirus is installed on the target machine, it must be disabled at least for the duration of the Application Suite installation. When the installation is finished, we recommend configuring the antivirus to exclude the folder where IAS has been installed to. More info are available [here](#).

More over:

- Remember to enable the Microsoft Windows DEP (Data Execution Prevention) only for Windows programs and services
- Disabling Windows Defender is mandatory

## Backup Data

This page is displayed only when you are reinstalling over an existing IAS installation. Click the button to launch the [Backup and Restore](#) utility of the installed IAS version. If the *Backup and Restore* utility does not start, see the troubleshooting section below.

## Select Destination Location

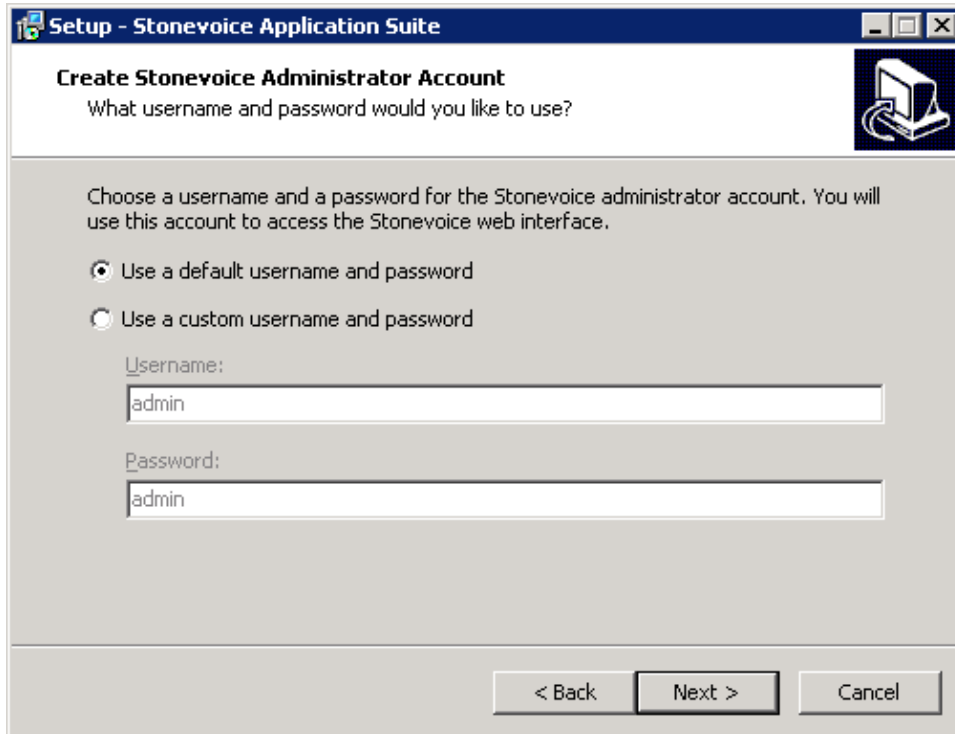
If you are installing the IAS for the first time on the target machine, you may select any folder you wish.

Note - The file system of the volume you are installing the IAS on must be **NTFS**. You cannot install the IAS on FAT file systems.

If you uninstalled the IAS from the target machine previously, you should install the IAS in the same folder where the previous package was installed.

## Create Imagicle Web Administration Account

This page allows you to modify the default username and password that the Imagicle Application Suite administrator will use to log on to the IAS web interface. This page also allows you to recover from a lost username or password because it will overwrite existing credentials.



**Setup - Stonevoice Application Suite**

**Create Stonevoice Administrator Account**  
What username and password would you like to use?

Choose a username and a password for the Stonevoice administrator account. You will use this account to access the Stonevoice web interface.

☒ Use a default username and password  
☐ Use a custom username and password

Username:

Password:

< Back    Next >    Cancel

The IAS administrator is a *super user* which always has full permissions on all the applications, and is allowed to configure the system and create other users with limited or extended permissions. This user cannot be deleted.

If you choose to accept the default value, the administrator will be able to access the IAS using the following default credentials:

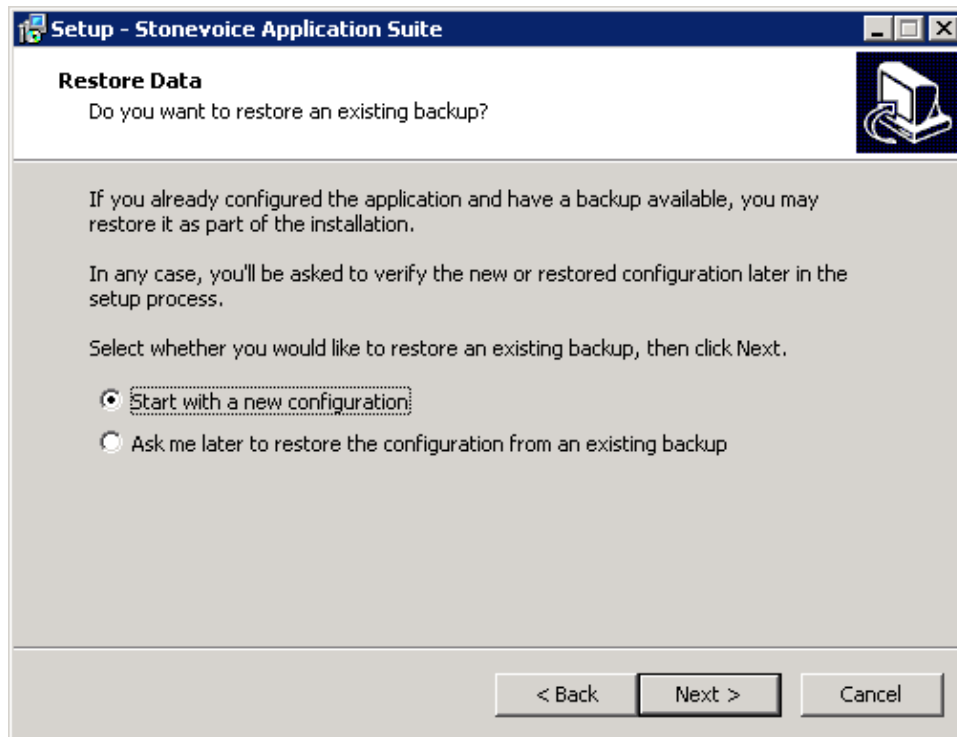
Username: **admin**

Password: **admin**

These credentials may be modified later from within the IAS web interface.

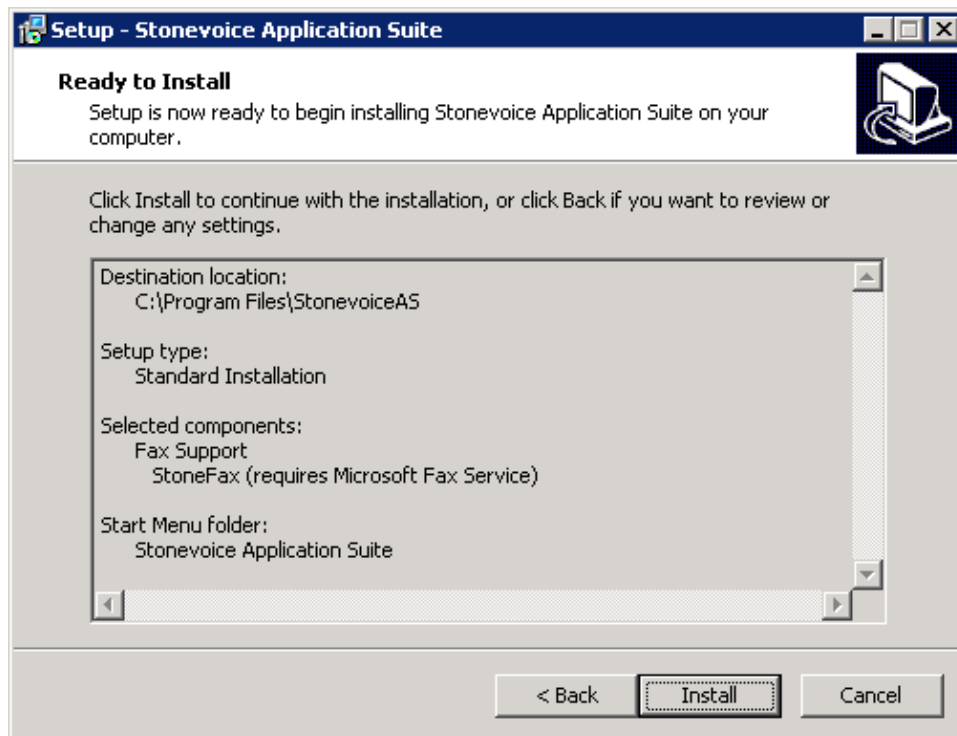
## Choose between clean setup and upgrade

If you are making a fresh installation, select "start with a new configuration". If you are performing an upgrade or a migration, select the other option. In this case the Setup program will launch the Restore tool when appropriate, asking for the location of the backup files.



## Begin installation

Review the information and press the "Install" button to start copying files and installing services.



## Installing 2020.Spring.1 release or newer

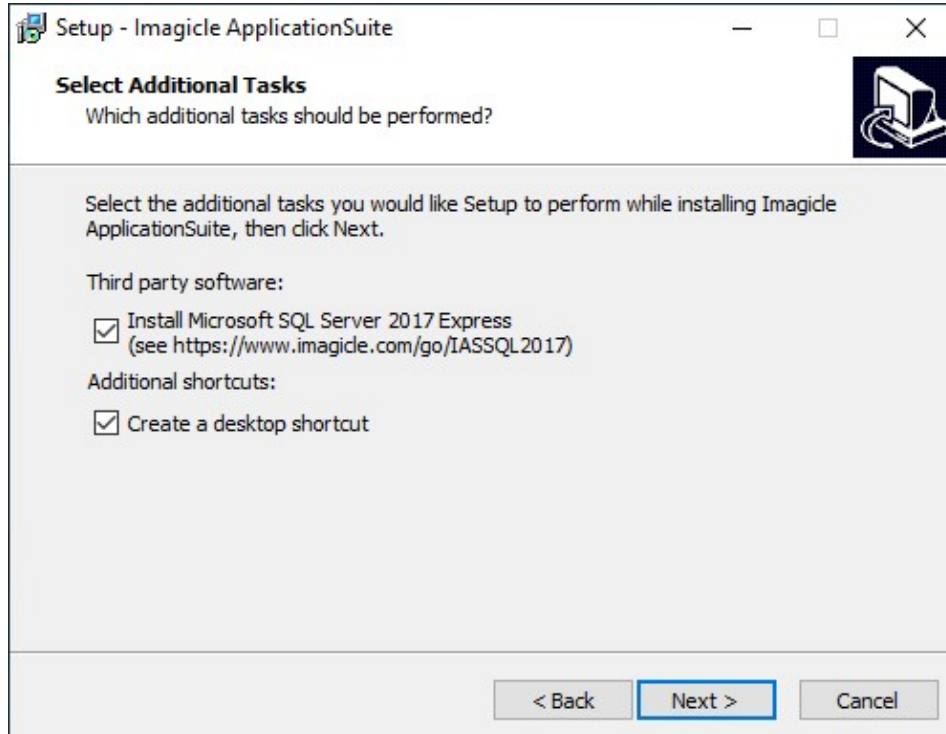
## imagicle

Starting from Spring 2020 release, the installation package embeds MS-SQL Server 2017 Express Edition, including Full-Text Search Service. This optional SQL service (mandatory from Spring 2021 release and above) allows a much quicker contact search across multiple Speedy directories, even involving millions of contact, without having to wait several seconds to get a response. You can also decide to avoid the installation of this service at a later wizard stage, even if it's not recommended.

Installation package prompts you to proceed with SQL 2017 installation. If you are going to leverage an existing, external SQL Server instance, you can uncheck relevant installation.

**IMPORTANT:** Starting from Imagicle 2023.Spring.1 release, MS-SQL Server 2008/2008R2 is supported only for updating an existing installation to Spring 2023, but you can't deploy a new Imagicle instance with such old MS-SQL version. Starting from 2023.Summer.1 release, MS-SQL 2008/2008R2 is not supported anymore and therefore a MS-SQL update is mandatory.

See below sample:



### Post-copy installation steps

Once the application files are installed, additional configuration is required.

### Local Area Code and Other Location Information

The following message is displayed when installing *StoneFax*.

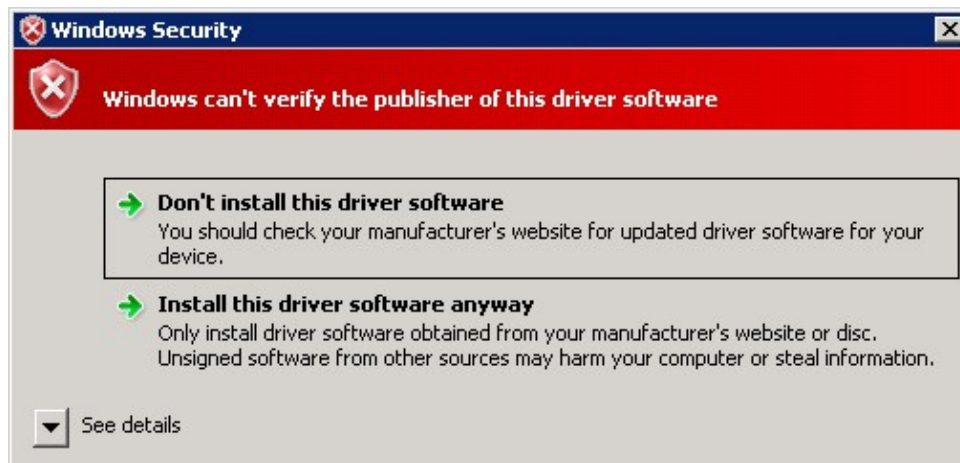
Now the "Phone and Modem Options" Control Panel applet will show to set the local area code. This operation is mandatory to send faxes.

OK

Choose your country and your local area code. Press OK. twice to close the control panel windows. Setup will resume when you press ok.

### Driver installation

The following alert is displayed when installing *StoneFax*. Press Yes / Install this Driver Anyway.



## Database connection

When installing the ApplicationSuite for the first time, by default, the IAS setup package installs a Microsoft SQL Express 2017 instance on the machine, to store configuration and data.

Here are the default settings for the local SQL server:

- SQL server instance: **IMAGICLE2017**
- Database name: **IAS**
- Username: **sa**
- Password: **SvBilIyBlues\$** (case sensitive)

**Billy Blue's setup wizard**

**Connecting to the SQL Server**  
Enter the data to access Microsoft SQL Server version 2008 (10.x) or higher.

SQL Server location:

☒ On this computer

☐ On another computer (hostname or IP address):

SQL Server Instance name (if exists):

Database name:

☐ Use secure connection

Authentication:

User name:

Password:

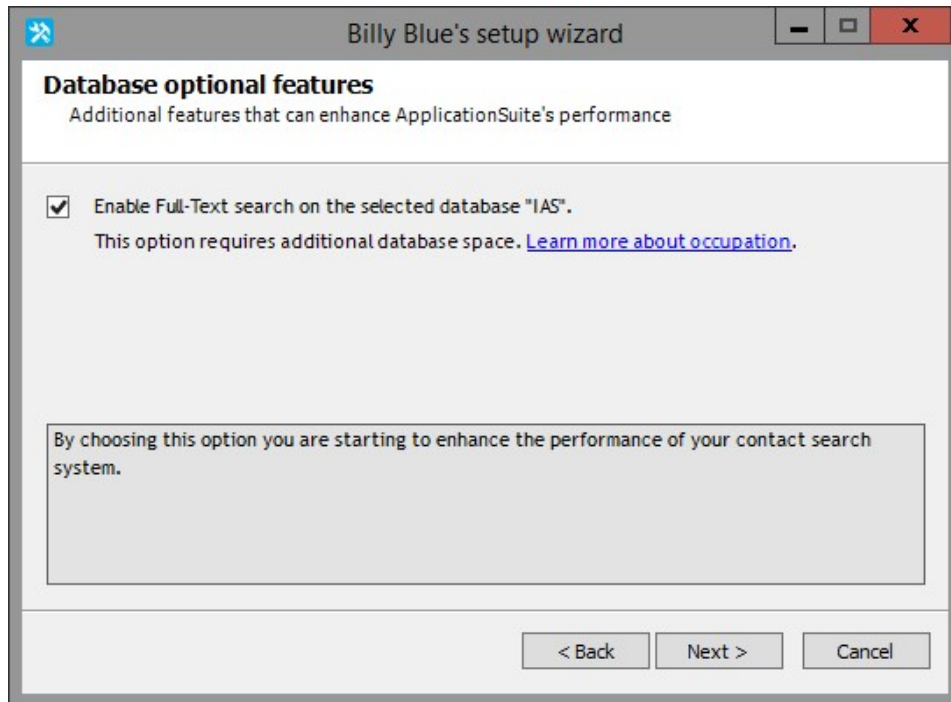
Accessing the database through **Windows Authentication** is supported, see [this page](#) for the required configurations to enable it.

Optionally, you can use a secure connection to an external, trusted, SQL Server.

You may test the connection by pressing the "Connection test" button.

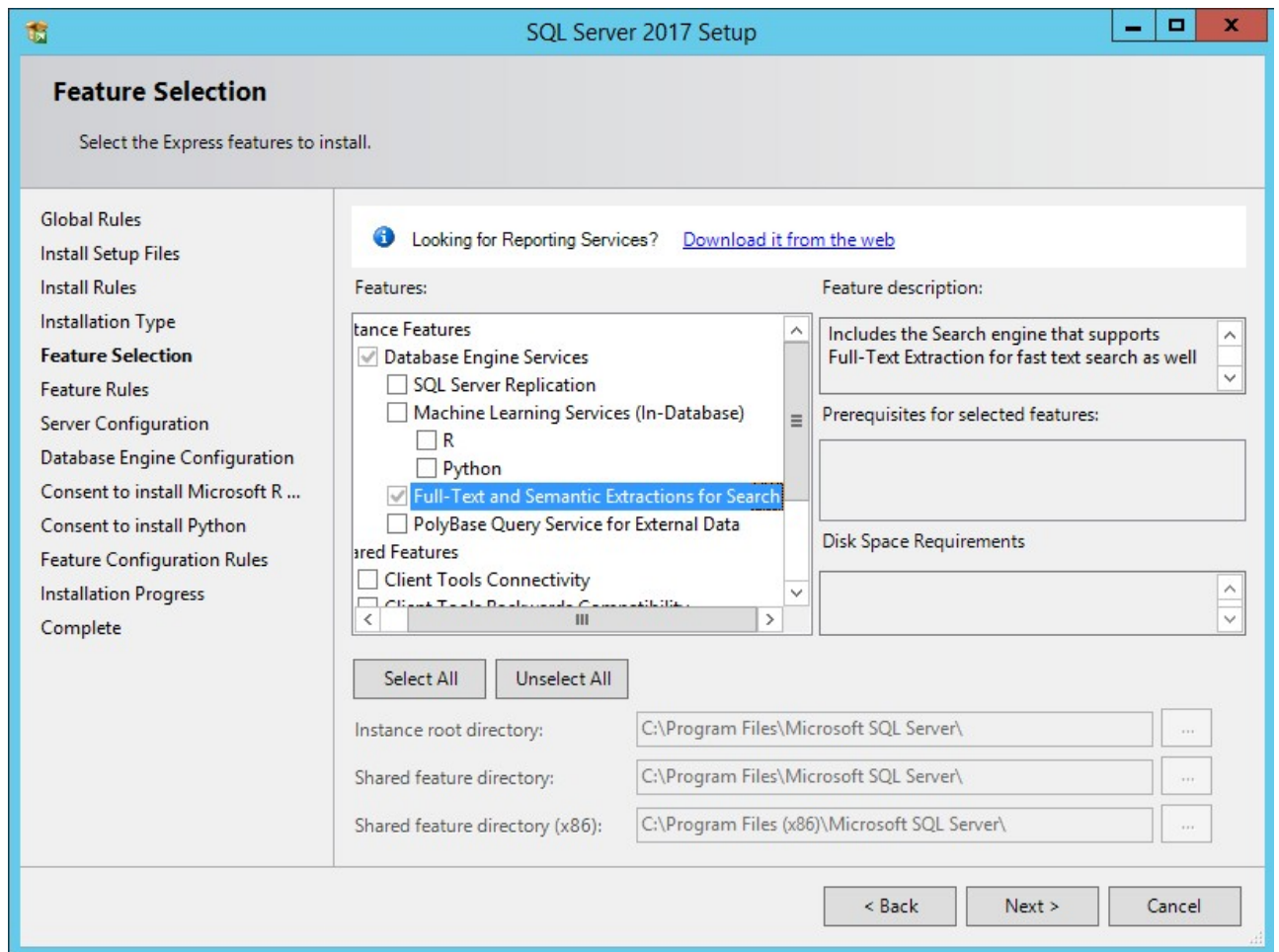
## Full-Text Search SQL Indexing Service

**On Imagicle 2020.Spring.1 release and above**, when you press "Next", the installation package prompts you to confirm the installation of Full-Text Search SQL indexing service (mandatory from Spring 2021 release and above). See below screenshot:



This window also appears if you have chosen another external SQL Server 2017 instance. If the alternative instance is from a different SQL version (MS-SQL Server 2012 or above), then you are prompted to manually install Full-Text service by running relevant SQL Server setup and install **Full-Text and Semantic Extractions for Search** feature. See below screenshot:





When you hit "Next", the **IAS** database will be added or updated (if already existing).

## Using an external SQL Server

As mentioned above, the Imagicle Application Suite can install a SQL Express 2017 instance to store configuration and data. However, you can leverage your own SQL Server instance, which can be installed on the same server or running on an external server.

In this case:

- Please, don't need create the database in advance: the database will be automatically created with by the setup procedure or running the DB configuration wizard of the application Suite.
- A SQL user must be created using the script and the password constraints specified at [this page](#). Alternatively, you can leverage the Windows authentication mechanism, applying the configurations described in the same page.

During the setup, in the setup DB wizard form, provide:

- the SQL server hostname/IP Address and, if different from standard, the port number (comma separated, for instance "172.10.54.22,1435")
- the SQL instance name
- the database name
- the user credentials of the user created at the previous point (if SQL authentication has been chosen).

When you press "Next", the IAS database will be added or updated.

## High availability notes



If leveraging an external SQL server, both the *AlwaysOn Failover Cluster Instances* and the *AlwaysOn Availability Groups* SQL server configurations are supported for high availability scopes.

If the AlwaysOn Availability Group configuration is used, a limitation applies to the restore mechanism: in such case, please, contact Imagicle to obtain the procedure needed to restore an Imagicle backup.

## **Server Restart**

Restart may be required when installing StoneFax. After restart you will have to wait while virtual hardware (modem) is created. This step might take some minutes to complete. After that, if required by the setup program, reboot a second time.

## **Setup Imagicle Billing (Billy Blue's or Blue's Enterprise)**

You'll be asked if you want to configure Billing call acquisition at the end of setup. You can safely skip this operation if you do not plan to evaluate or use that application. Blue's configuration wizard can be run later, if needed, from the start menu.

## **Evaluation grace period**

When the IAS is installed for the first time on a server appliance, all the applications are available in evaluation mode and they will expire after 30 days, if not registered.

## **Server timezone change**

After changing the server timezone, you need to restart the server in order to apply the change to all running Imagicle services.

# Microsoft Windows OS Activation on Imagicle Virtual Appliance

## Imagicle Virtual Appliance's Windows Evaluation period

Imagicle VA comes with Windows Server OS preinstalled and running in evaluation mode. If server can access Internet, evaluation period is **180 days**; otherwise, evaluation period is just **10 days**.

**Once evaluation period is ended, Imagicle VA automatically shuts down after one hour, without notice.**

The evaluation period can be re-armed (for additional 10 days) for maximum 6 times using the following command line from PowerShell with admin privileges: **`slmgr /rearm`**

## Windows OS Activation

This chapter explains how to activate your Microsoft Windows OS on an Imagicle Virtual Appliance, by converting its version from "Evaluation" to "Standard" or "Datacenter" Edition, depending on purchased license.

## Requirements

- A valid Windows Server 2016 or 2019 Standard/Datacenter license
- Provide a temporary Internet access to Imagicle VA, to ease the activation.

## Procedure

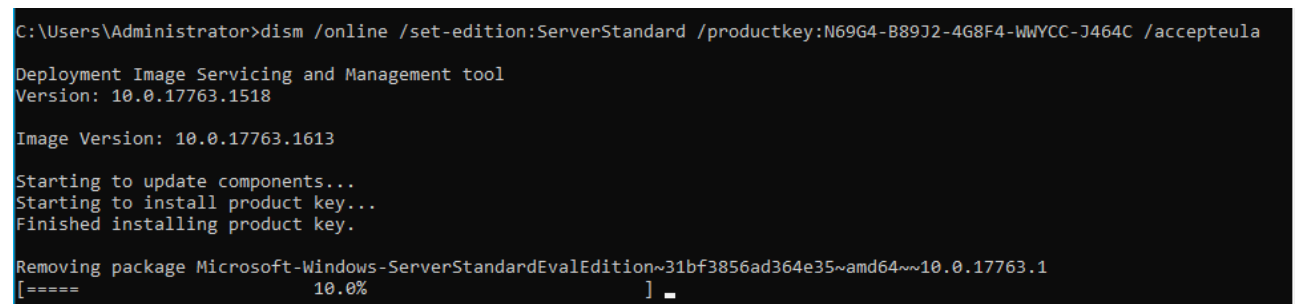
- If you have Windows Server 2016 or 2019 Standard Edition license, you can leverage existing "Activate Windows" batch file available in server's desktop or you can launch PowerShell as Administrator from Start menu and enter the license in the following command line, replacing red code:

```
dism /online /set-edition:ServerStandard
/productkey:XXXXX-YYYYY-HHHHH-ZZZZZ-KKKKK /accepteula
```

- If you have Windows Server 2016 or 2019 Datacenter Edition license, enter it in the following PowerShell command line, replacing red code:

```
dism /online
/set-edition:ServerDatacenter /productkey:XXXXX-YYYYY-HHHHH-ZZZZZ-KKKKK /accepteula
```

- Please wait several minutes for Windows license to be properly installed and activated.



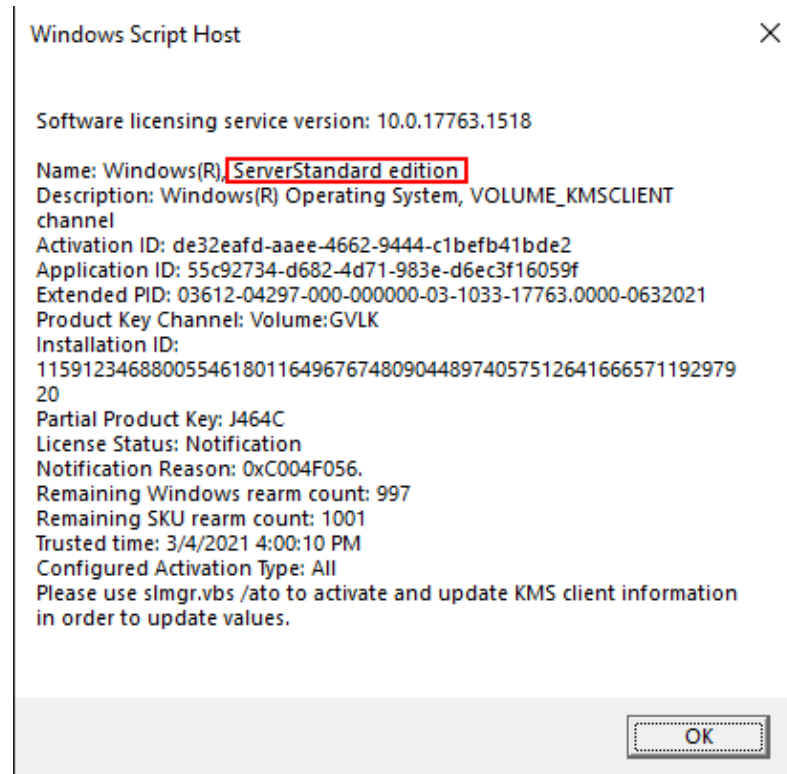
```
C:\Users\Administrator>dism /online /set-edition:ServerStandard /productkey:N69G4-B89J2-4G8F4-WWYCC-J464C /accepteula
Deployment Image Servicing and Management tool
Version: 10.0.17763.1518

Image Version: 10.0.17763.1613

Starting to update components...
Starting to install product key...
Finished installing product key.

Removing package Microsoft-Windows-ServerStandardEvalEdition~31bf3856ad364e35~amd64~~10.0.17763.1
[===== 10.0% ]
```

- ⚠ ⚠ If the command is success, please reboot Imagicle VM.
- After reboot, check Windows edition information by issuing the following command from PowerShell: **`slmgr /dlv`**
- Expected result should be similar to below screenshot:



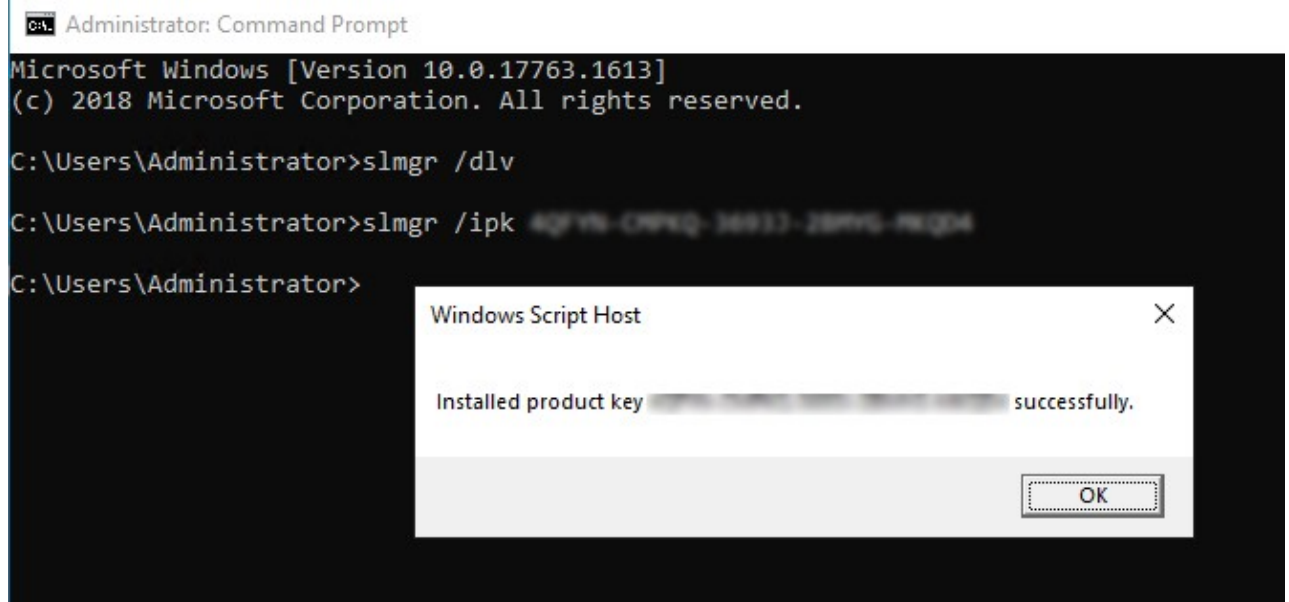
- If Imagicle VM can reach Internet, the license is automatically activated without any further action.

## Alternative procedure

- If above procedure failed, you can repeat license installation by issuing same PowerShell command, replacing actual purchased Windows license with a temporary *KMS* (Key Manager System) Windows license available [here](#).
- Once KMS Windows license has been applied and server has been rebooted, you can apply the actual purchased license by entering it (red code) in the following PowerShell command line:

```
slmgr /ipk XXXXX-YYYYY-HHHHH-ZZZZZ-KKKKK
```

- See below command output sample:



- If Imagicle VM can reach Internet, the license is automatically activated without any further action. Otherwise, you need to perform the offline activation by calling your local [Microsoft Activation Center](#).

# Activation

## Windows

Edition	Windows Server 2019 Standard
Activation	Windows is not activated
Product ID	00429-10027-33493-AAOEM
Product Key	XXXXX-XXXXX-XXXXX-XXXXX-MKQD4

We can't activate Windows on this device as our activation servers aren't available right now. Make sure you're connected to the Internet and we'll automatically try to activate Windows when the service becomes available. Error code: 0x80072EE7

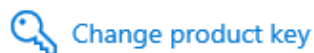
If you're having problems with activation, select Troubleshoot to try and fix the problem.



## Activate Windows now

Running a non-genuine copy of Windows can put you at greater risk for viruses and other security threats.

To get genuine Windows, enter a different product key. If you don't have one, contact your system administrator.



## ← Call and provide your installation ID

Call one of these numbers. The automated phone system will ask for your installation ID (IID). Some charges may be applied by local operators for toll-free numbers in certain countries or regions.

**Toll free:**

(800) 531 042

**Toll:**

(39) (02) 3604 6340

**Installation ID:**

1 2 3 4 5 6 7 8 9

0 1 2 3 4 5 6 7 8 9

[Read our privacy statement](#)

Enter confirmation ID

Cancel