Administrator Guide

Installation Guide
2021 R1

Acumatica
The Cloud ERP

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Acumatica ERP and Acumatica Framework Installation Guide

This guide provides system requirements and detailed instructions for installing, maintaining, updating, and deleting Acumatica ERP and Acumatica Framework.

This guide covers the following topics:

- *System Requirements for Acumatica ERP 2021 R1*
- *System Requirements for Acumatica Framework 2021 R1*
- *Preparing for Installing Acumatica ERP*
- *Installing Acumatica ERP*
- *Installing Acumatica Framework*
- *Licensing and Activating Acumatica ERP*
- *Maintaining Acumatica ERP*
- *Maintaining Acumatica Framework*
- *Uninstalling Acumatica ERP*
- *Using the Command-Line Tool*

System Requirements for Acumatica ERP 2021 R1

Acumatica ERP contains the following parts: web interface, the server part and the database. For proper work of each of these parts the environment where you install and use Acumatica ERP, should meet particular requirements that are described in this topic.

> ⚠ Before you start the installation process, install at least all critical updates (or, preferably, all available updates) for the operating system and the required software. You should also make sure that all required third-party components listed in this topic are properly installed and configured on your computer.

Workstations

Workstations that are used by employees of your organization to work with Acumatica ERP should meet hardware and software requirements listed in the table below.

Hardware/Software	Requirements
Display resolution	Minimum 1024×768, Typical 1920x1080
Adobe Reader (to open Acumatica ERP PDF documents)	2019 or later
Microsoft Office (to view documents exported from Acumatica ERP)	• 2019 • 2016 • 2013 • 2010 • 2007 • 2003 with the Microsoft Office 2007 compatibility pack
Web Browsers	
Microsoft Internet Explorer	9, 10, and 11 with Compatibility View turned off. ⚠ For Microsoft Internet Explorer 10 the hotfix for the ASP.NET browser definition files in the Microsoft .NET Framework 4.0 should be installed. For more information, see *http://support.microsoft.com/kb/2600088*.
Microsoft Edge	44 or later
Mozilla Firefox	82 or later
Apple Safari	12 or later
Google Chrome	87 or later

Server Part

The environment where you install the server part of the Acumatica ERP should meet hardware and software requirements listed in the table below.

Hardware/Software	Requirements
Operating systems	• Windows Server 2019 64-bit edition • Windows Server 2016 64-bit edition • Windows Server 2012 64-bit edition • Windows Server 2012 R2 64-bit edition • Windows Server 2008 64-bit edition • Windows Server 2008 R2 64-bit edition ⚠ You can install the server part of Acumatica ERP on non-server operating systems, such as Windows Vista 64-bit edition, Windows 7.0 64-bit edition, Windows 8.0 64-bit edition, Windows 8.1 64-bit edition, and Windows 10 64-bit edition, but only for testing purposes. For production you must use a server operating system.
Microsoft .NET Framework	4.8
Microsoft .NET Core	3.1
Microsoft Internet Information Services	7.0, 7.5, 8.0, 8.5, or 10 depending on the underlying operating system. ⚠ You must set the “Enable 32-bit Applications” option to False in IIS settings. Acumatica ERP 2021 R1 supports only the Integrated mode of the application pool. The Classic mode is not supported. If you try to upgrade an earlier version of Acumatica ERP with Classic mode of the application pool to 2021 R1, upgrade will not be performed, and a corresponding error message will be displayed.
Memory	16 GB RAM
CPU	2 cores; 3.5 GHz
Hard Disk Space	1 GB available hard disk space plus 200 MB for each additional instance of Acumatica ERP

Database

You can find system requirements for the Acumatica ERP database in the following table.

Hardware/Software	Requirements
Microsoft SQL Server	• 2019 • 2017 • 2016
MySQL Community Edition Server	5.7 and 8.0 64-bit edition
Memory	8 GB RAM
CPU	2 cores; 2 GHz
Hard Disk Space	For each database, 1 GB available hard disk space. Depending on the number of transactions, additional hard disk space may be required to store large numbers of transactions.

Code Authoring Environments

To create stand-alone applications with Acumatica ERP or develop customizations and add-on solutions on top of Acumatica ERP, you need one of the integrated development environments (IDEs) listed in the table below.

IDE	Requirements
Microsoft Visual Studio with Microsoft Web Developer Tools	• 2019: Community, Professional, and Enterprise editions

System Requirements for Acumatica Framework 2021 R1

Acumatica Framework is a Web 2.0 application development platform you use to develop business applications, such as enterprise resource planning (ERP) systems. Acumatica Framework includes server software and a database. For proper work of each of these parts the environment where you install and use Acumatica Framework, should meet particular requirements that are described in this topic.

> ⚠ Before you start the installation process, install at least all critical updates (or, preferably, all available updates) for the operating system and the required software. You should also make sure that all required third-party components listed in this topic are properly installed and configured on your computer.

Server Part

The environment where you install the server part of Acumatica Framework should meet hardware and software requirements listed in the table below.

Hardware/Software	Requirements
Operating systems	• Windows Server 2019 64-bit edition • Windows Server 2016 64-bit edition • Windows Server 2012 64-bit edition • Windows Server 2012 R2 64-bit edition • Windows Server 2008 64-bit edition • Windows Server 2008 R2 64-bit edition ⚠ You can install the server part of Acumatica ERP on non-server operating systems, such as Windows Vista 64-bit edition, Windows 7.0 64-bit edition, Windows 8.0 64-bit edition, Windows 8.1 64-bit edition, and Windows 10 64-bit edition, but only for testing purposes. For production you must use a server operating system.
Microsoft .NET Framework	4.8
Microsoft .NET Core	3.1
Microsoft Internet Information Services	7.0, 7.5, 8.0, 8.5, or 10 depending on the underlying operating system. ⚠ You must set the “Enable 32-bit Applications” option to False in IIS settings. Acumatica ERP 2021 R1 supports only the Integrated mode of the application pool. The Classic mode is not supported. If you try to upgrade an earlier version of Acumatica ERP with Classic mode of the application pool to 2021 R1, upgrade will not be performed, and a corresponding error message will be displayed.

Hardware/Software	Requirements
Memory	16 GB RAM
CPU	2 cores; 3.5 GHz
Hard Disk Space	1 GB available hard disk space plus 200 MB for each additional instance of Acumatica ERP

The database server and the application server must not be located on the same hardware.

Database

You can find system requirements for the Acumatica ERP database in the following table.

Hardware/Software	Requirements
Microsoft SQL Server	• 2019 • 2017 • 2016
MySQL Community Edition Server	5.7 and 8.0 64-bit edition
Memory	8 GB RAM
CPU	2 cores; 2 GHz
Hard Disk Space	For each database, 1 GB available hard disk space. Depending on the number of transactions, additional hard disk space may be required to store large numbers of transactions.

Code Authoring Environments

To create stand-alone applications with Acumatica Framework, you need one of the integrated development environments (IDEs) listed in the table below.

IDE	Requirements
Microsoft Visual Studio with Microsoft Web Developer Tools	• 2019: Community, Professional, and Enterprise editions

Typical Hardware and Virtual Machine Configurations for PCS and PCP Licenses

When your organization purchases a Private Cloud Subscription (PCS) or Private Cloud Perpetual (PCP) license for Acumatica ERP your purchase manager selects a License Tier, which limits the parameters that influence system performance. The License Tiers are grouped in the following series:

- S Series: Includes S1, S2, and S3 Tiers
- M Series: Includes M1, M2, and M3 Tiers
- L Series: Includes L1, L2, L3, and L4 Tiers
- X Series: Includes X1, X2, X3, and X4 Tiers
- E Series: Includes E1, E2, E3, E4, and E5 Tiers

This topic contains typical server configurations for PCS and PCP licenses that depend on the series of your License Tier, the software requirements for the server part of the system, and the system requirements for workstations.

Server Configurations

This section describes typical hardware specifications for servers used to host Acumatica ERP (which includes the application server and the database) and typical configurations of Amazon Web Services and Microsoft Azure instances for each series of License Tiers.

You should install the application server and the database on separate virtual machines or physical servers. In the following subsections, you can find typical specifications for each of these configurations.

Table: Virtualization on VMWare or Hyper-V: Typical Specifications Based on Series of License Tiers

In this table, you can find typical specifications for the physical server where virtual machines (VM) for Acumatica ERP server part will be installed, and resources that should be allotted for these virtual machines.

License Series and Tiers/ Typical Configuration	**S Series**	**M Series**	**L Series**		**X Series**	
	S1-S3	**M1-M3**	**L1, L2**	**L3, L4**	**X1, X2**	**X3, X4**
Physical Server Specification						
Number of physical CPUs	1	1	1	2	2	2
Total number of physical CPU cores	6	6	6	12	12	12
Typical processor	Xeon E5 2620	Xeon E5 2620	Xeon E5 2620	Xeon E5 2620	Xeon E5 2620	Xeon E5 2658
RAM	32GB	64GB	64GB	128GB	128GB	256GB
*Hard drive size**	250GB	500GB	500GB	500GB	750GB	1TB

License Series and Tiers/ Typical Configuration	**S Series**	**M Series**	**L Series**		**X Series**	
	S1-S3	**M1-M3**	**L1, L2**	**L3, L4**	**X1, X2**	**X3, X4**
Hard drive type	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD PCIE3x4 300K+ IOPS 2000MBps + R/W	SSD PCIE3x4 300K+ IOPS 2000MBps + R/W	SSD PCIE3x4 300K+ IOPS 2000MBps + R/W
RAID	1	1	1	10	10	10
Application Server VM						
VM Allotted CPU Cores	2	2	4	4	8	8
VM RAM	16GB	24GB	24GB	32GB	32GB	96GB
Database Server VM						
VM Allotted CPU Cores	2	2	4	4	8	8
VM RAM	8GB	32GB	32GB	64GB	64GB	128GB

* You need two hard drives: one for the Application Server VM and one for the Database Server VM.

Contact your partner for hardware guidance on E series of License Tiers.

When you install Acumatica ERP on virtual machines, you should consider the following:

- You should install the application server and the database on separate virtual machines.
- You should allocate these virtual machines for Acumatica ERP only (no other software should be installed there, including antivirus software).
- Virtual machines decrease hardware performance by approximately 15%. For maximum performance, you could eliminate VMs and run directly on the node OS, however, you will lose benefits and flexibility of VMs. Most clients choose VMs for this reason.
- You should not use dynamic memory for virtual machines. You need to allocate a required RAM capacity for each virtual machine.
- Each virtual machine should use a separate physical hard drive. That is, you should not share one physical hard drive between multiple virtual machines.
- If you use hard drives with low writing speed, then increasing RAM will not improve the database performance. We recommend that you use hard drives with high writing speed for the database server.

You should not use the RAID 5 level for hard drives because of low writing speed.

Table: Separate Physical Servers: Typical Specifications Based on Series of License Tiers

In this table, you can find typical specifications for the Acumatica ERP Application Server and the Database Server.

License Series and Tiers/ Typical Configuration	**S Series**	**M Series**	**L Series**		**X Series**	
	S1-S3	**M1-M3**	**L1, L2**	**L3, L4**	**X1, X2**	**X3, X4**
Application Server						
Number of physical CPUs	1	1	1	1	2	2
Total number of physical CPU cores	6	6	6	6	12	12
Typical processor	Xeon E5 2620	Xeon E5 2620	Xeon E5 2620	Xeon E5 2620	Xeon E5 2620	Xeon E5 2620
Hypervisor	OFF	OFF	OFF	OFF	OFF	OFF
RAM	32GB	64GB	64GB	128GB	128GB	256GB
Hard drive size	250GB	500GB	500GB	500GB	500GB	500GB
Hard drive type	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD Sata3 90K+ IOPS 500MBps+ R/W
RAID	1	1	1	10	10	10
Database Server						
Number of physical CPUs	1	1	1	2	2	2
Total number of physical CPU cores	6	6	6	12	12	16
Typical processor	Xeon E5 2620	Xeon E5 2620	Xeon E5 2620	Xeon E5 2620	Xeon E5 2620	Xeon E5 2658
Hypervisor	ON	ON	ON	ON	ON	ON
RAM	32GB	64GB	64GB	128GB	128GB	256GB
Hard drive size	250GB	500GB	500GB	500GB	750GB	1TB

License Series and Tiers/ Typical Configuration	S Series	M Series	L Series		X Series	
	S1-S3	M1-M3	L1, L2	L3, L4	X1, X2	X3, X4
Hard drive type	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD Sata3 90K+ IOPS 500MBps+ R/W	SSD PCIE3x4 300K+ IOPS 2000MBps + R/W	SSD PCIE3x4 300K+ IOPS 2000MBps + R/W	SSD PCIE3x4 300K+ IOPS 2000MBps + R/W
RAID	1	1	1	10	10	10

Contact your partner for hardware guidance on E series of License Tiers.

When you install Acumatica ERP on separate physical servers, you should consider the following:

- You should install the application server and the database on separate servers.
- You should allocate these servers for Acumatica ERP only (no other software should be installed there, including antivirus software).
- Network latency between an application server and a database should be less than 1 millisecond (both servers should be in the same data center).
- If you use hard drives with low writing speed, then increasing RAM will not improve the database performance. We recommend that you use hard drives with high writing speed for the database server.

You should not use the RAID 5 level for hard drives because of low writing speed.

Table: Amazon Web Services: Recommended Instances Based on Series of License Tiers

In this table, you can find recommended parameters of standard instances provided by Amazon Web Services (AWS) where Acumatica ERP will be hosted.

License Series and Tiers/ Typical Configuration	S Series	M Series	L Series		X Series	
	S1-S3	M1-M3	L1, L2	L3, L4	X1, X2	X3, X4
Application Server VM						
AWS instance type	m4.large	r4.large	m4.xlarge	r4.xlarge	m4.2xlarge	r4.4xlarge
*vCPU**	2	2	4	4	8	16
*RAM (GB)**	8	15.25	16	30.5	32	64
*Hard drive type***	gp2	gp2	gp2	gp2	gp2	gp2
Hard drive size	250GB	500GB	500GB	500GB	750GB	1TB
Network performance	Moderate	Up to 10 Gigabit	High	Up to 10 Gigabit	High	Up to 10 Gigabit

License Series and Tiers/ Typical Configuration	S Series	M Series	L Series		X Series	
	S1-S3	M1-M3	L1, L2	L3, L4	X1, X2	X3, X4
Database Server VM						
AWS instance type	m4.large	r4.xlarge	r4.xlarge	r4.2xlarge	r4.2xlarge	r4.4xlarge
*vCPU**	2	4	4	8	8	16
*RAM (GB)**	8	30.5	30.5	61	61	122
*Hard drive type***	io1 + 3000 IOPS	io1 + 4000 IOPS	io1 +5000 IOPS	io1 + 8000 IOPS	io1 + 8000 IOPS	io1 + 15000 IOPS
Hard drive size	250GB	500GB	500GB	500GB	750GB	1TB

* Number of CPUs and RAM size are defined by the instance type; these parameters are provided in the table for reference.

**The IOPS parameter for a hard drive of the *gp2* type is calculated automatically by AWS according to hard drive size.

When you deploy Acumatica ERP in AWS, you should consider the following:

- All AWS instances should be EBS-optimized.
- If you want to increase speed of storage, you need to select the higher network performance between the Database Server VM and the Application Server VM.

Table: Microsoft Azure: Recommended Instances Based on Series of License Tiers

In this table, you can find recommended parameters of standard instances provided by Microsoft Azure (Azure) where Acumatica ERP will be hosted.

License Series and Tiers/ Typical Configuration	S Series	M Series	L Series		X Series	
	S1-S3	M1-M3	L1, L2	L3, L4	X1, X2	X3, X4
Application Server VM						
Azure instance type	DS11_v2 Standard	DS12_v2 Standard	DS12_v2 Standard	DS12_v2 Standard	DS13_v2 Standard	DS14_v2 Standard
*vCPU**	2	4	4	4	8	16
*RAM (GB)**	14	28	28	28	56	112
Hard drive size	250GB	500GB	500GB	500GB	750GB	1TB
Database Server VM						
Azure instance type	F4 Standard	DS12_v2 Standard	DS12_v2 Standard	DS13_v2 Standard	DS13_v2 Standard	DS14_v2 Standard
*vCPU**	4	4	4	8	8	16

License Series and Tiers/ Typical Configuration	S Series	M Series	L Series		X Series	
	S1-S3	M1-M3	L1, L2	L3, L4	X1, X2	X3, X4
*RAM (GB)**	8	28	28	56	56	112
Hard drive type	3000 IOPS	4000 IOPS	5000 IOPS	8000 IOPS	8000 IOPS	15000 IOPS
Hard drive size	250GB	500GB	500GB	500GB	750GB	1TB

* Number of CPUs and RAM size are defined by the instance type; these parameters are provided in the table for reference.

Software Requirements for the Server Part

The environment where you install the server part (the Application Server and the Database Server) of the Acumatica ERP should meet software requirements listed in the table below.

Table: Application Server

Software	Requirements
Operating systems	• Windows Server 2019 64-bit edition • Windows Server 2016 64-bit edition • Windows Server 2012 64-bit edition • Windows Server 2012 R2 64-bit edition • Windows Server 2008 64-bit edition • Windows Server 2008 R2 64-bit edition ⚠ You can install the server part of Acumatica ERP on non-server operating systems, such as Windows Vista 64-bit edition, Windows 7.0 64-bit edition, Windows 8.0 64-bit edition, Windows 8.1 64-bit edition, and Windows 10 64-bit edition, but only for testing purposes. For production you must use a server operating system.
Microsoft .NET Framework	4.8
Microsoft Internet Information Services	7.0, 7.5, 8.0, 8.5, or 10 depending on the underlying operating system. ⚠ You must set the “Enable 32-bit Applications” option to False in IIS settings. Acumatica ERP 2021 R1 supports only the Integrated mode of the application pool. The Classic mode is not supported. If you try to upgrade an earlier version of Acumatica ERP with Classic mode of the application pool to 2021 R1, upgrade will not be performed, and a corresponding error message will be displayed.
CPU	2 cores; 3.5 GHz

Software	Requirements
Memory	16 GB RAM

Table: Database Server

Software	Requirements
Microsoft SQL Server	• 2019 • 2017 • 2016
MySQL Community Edition Server	5.7 and 8.0 64-bit edition
CPU	2 cores; 2GHz
Memory	8 GB RAM

The database server and the application server must not be located on the same hardware.

System Requirements for Workstations

Workstations that are used by employees of your organization to work with Acumatica ERP should meet hardware and software requirements listed in the table below.

Hardware/Software	Requirements
Display resolution	Minimum 1024×768, Typical 1920x1080
Adobe Reader (to open Acumatica ERP PDF documents)	2019 or later
Microsoft Office (to view documents exported from Acumatica ERP)	• 2019 • 2016 • 2013 • 2010 • 2007 • 2003 with the Microsoft Office 2007 compatibility pack
Web Browsers	
Microsoft Internet Explorer	9, 10, and 11 with Compatibility View turned off.  For Microsoft Internet Explorer 10 the hotfix for the ASP.NET browser definition files in the Microsoft .NET Framework 4.0 should be installed. For more information, see *http://support.microsoft.com/kb/2600088*.

Hardware/Software	Requirements
Microsoft Edge	44 or later
Mozilla Firefox	82 or later
Apple Safari	12 or later
Google Chrome	87 or later

Preparing for Installing Acumatica ERP

Before you start installing Acumatica ERP, you may have to configure your system, including the following:

- *Configuring Web Server (IIS) Features*
- *Setting Up an HTTPS Service in Web Server (IIS)*
- *Enabling Semantic Search for Microsoft SQL Server*

If you need to install only Acumatica Report Designer, you do not need to perform the configuration tasks mentioned above. In this case, a warning will be displayed during the installation of Acumatica Report Designer; you should click **OK** in the warning box.

Configuring Web Server (IIS) Features

Before you install the Acumatica ERP server software, make sure that the following Web Server (IIS) features are turned on:

- **Web Management Tools > IIS Management Console**
- **World Wide Web Services > Application Development Features > .NET Extensibility**
- **World Wide Web Services > Application Development Features > ASP.NET**
- **World Wide Web Services > Application Development Features > ISAPI Extensions**
- **World Wide Web Services > Application Development Features > ISAPI Filters**
- **World Wide Web Services > Common HTTP Features > Default Document**
- **World Wide Web Services > Common HTTP Features > Static Content**
- **World Wide Web Services > Performance Features > Dynamic Content Compression**
- **World Wide Web Services > Performance Features > Static Content Compression**
- **World Wide Web Services > Security > Request Filtering**

Make sure, that for each application pool you are planning to use with Acumatica ERP 2021 R1 version or later, the **Enable 32-bit Applications** parameter is set to *False* (the parameter is located under the **IIS Manager > Application Pools > Edit Application Pool > Advanced Settings** menu).

Setting Up an HTTPS Service in Web Server (IIS)

HTTPS is a secure communications channel that is used to exchange information between a client computer and a server. You may need to set up an HTTPS service in Web Server (IIS)—for example, if your users export data to Microsoft Excel and want to update the data automatically, or you want to use single sign-on (SSO).

To enable SSL in Web Server (IIS), you must first obtain a certificate that is used to encrypt and decrypt the information that is transferred over the network. You receive a certificate file from the certification authority, and then register the certificate with your Web Server (IIS). For instructions, refer to the documentation of your Web Server (IIS).

Acumatica ERP does not support self-signed certificates.

Enabling Semantic Search for Microsoft SQL Server

To access the full-text search functionality, you have to install the Semantic Search for the Microsoft SQL Server. For more information on searching in Acumatica ERP, see *Managing Search* in the Acumatica ERP System Administration Guide.

To install Semantic Search, do the following:

- Select **Full-Text and Semantic Extractions for Search** on the **Features to Install** page during Microsoft SQL Server setup.

For details, see the documentation to Microsoft SQL Server.

Installing Acumatica ERP

Acumatica ERP is a web-based application that users can access from any computer by using a web browser. The following topics (and the topics beneath them) describe the Acumatica ERP installation and deployment options:

- *Installing Acumatica ERP Locally*
- *Setting Up Acumatica Self-Service Portal*
- *Installing Acumatica ERP in a Data Center*

Related Links

- *System Requirements for Acumatica ERP 2021 R1*
- *Using the Command-Line Tool*
- *Updating Acumatica ERP*
- *Deploying the Acumatica ERP Service on Windows Azure*

Installing Acumatica ERP Locally

You can install Acumatica ERP locally where you want it to be installed. Before you install Acumatica ERP, make sure that the server computer and software meet the system requirements specified in *System Requirements for Acumatica ERP 2021 R1*.

To install an Acumatica ERP instance locally, you perform the following steps:

1. Install the Acumatica ERP Tools on a server. For more information, see *To Install the Acumatica ERP Tools*.
2. Deploy an Acumatica ERP instance on the server by using the Acumatica ERP Configuration Wizard. For more information, see *To Deploy an Acumatica ERP Instance*.
3. Start working with Acumatica ERP by changing the password of the default user. For details, see *To Change the Password at the First Sign-In*.

Acumatica ERP Tools

The Acumatica ERP Tools include the following:

- The Acumatica ERP Configuration Wizard: A required software component that gives you the ability to deploy new application instances, delete application instances, and perform application and database maintenance.
- The Acumatica Report Designer: An optional software component that provides visual tools that you can use to design custom reports for Acumatica ERP. For more information, see *Acumatica Report Designer Guide*.
- The Debugger Tools: An optional set of software components that gives you a limited ability to debug the deployed Acumatica ERP instances. If you choose to install the Debugger Tools, in the installation directory, the installer adds the `Sources` folder and .pdb files to the `bin` folder. The `Sources` folder contains core files from Acumatica Framework which you can use when debugging the application.

Related Links

- *System Requirements for Acumatica ERP 2021 R1*
- *Acumatica Report Designer Guide*
- *To Install the Acumatica ERP Tools*
- *To Deploy an Acumatica ERP Instance*

- *To Change the Password at the First Sign-In*

To Install the Acumatica ERP Tools

To install the Acumatica ERP Tools, run the Acumatica ERP installation program, and follow the instructions of the Acumatica ERP Installer wizard:

1. On the Welcome page, click **Next**.
2. On the License Agreement page, read the license agreement. To accept the license agreement, select the **I accept the terms in the License Agreement** check box.
3. Click **Next**.
4. On the Main Software Configuration page, select any of the following check boxes:
   - **Launch the Acumatica ERP Configuration Wizard (Recommended)**: Select this check box to continue deploying the Acumatica ERP application instance once you install the Acumatica ERP Tools.
   - **Install Report Designer**: Select this check box to install the optional Acumatica Report Designer. For more information, see *Acumatica Report Designer Guide*.
   - **Install Debugger Tools**: Select this check box if you want to install the optional Debugger Tools component.
   - **Install DeviceHub**: Select this check box if you want to install the optional DeviceHub application. (You can use this application to connect hardware devices, such as printers, scanners, and digital scales. You can also then configure a set of default printers to streamline the printing of documents for users, regardless of the physical location of the users and printers.) For detailed instructions on setting up hardware devices via DeviceHub, see *Configuring Hardware Devices in DeviceHub*.
5. Click **Next**.
6. On the Destination Folder page, specify the location where you want to install Acumatica ERP Tools, and then click **Next**.
7. On the Ready to install Acumatica ERP2021 R1 page, click **Install**.
8. After the installation has been completed, click **Finish**.

If you did not select the **Launch the Acumatica ERP Configuration Wizard** check box in Step 4, you can run Acumatica ERP Configuration Wizard anytime by selecting **Start > Acumatica > Acumatica ERP Configuration**.

To Deploy an Acumatica ERP Instance

You deploy an Acumatica ERP instance by using the Acumatica ERP Configuration Wizard.

To Deploy a New Acumatica ERP Application Instance

1. Run the Acumatica ERP Configuration Wizard. For example, select **Start > Acumatica > Acumatica ERP Configuration**.
2. On the Welcome page, click **Deploy New Application Instance**.

   Alternatively, on the Welcome page of the Acumatica ERP Configuration Wizard, click **Perform Application Maintenance**, and then click **New** on the Application Maintenance page.

3. On the Database Server Connection page, specify the database server that will be used by the Acumatica ERP instance:
   a. In the **Server Type** box, choose the server type. The following options are available: *Microsoft SQL Server* or *MySQL Server*.
   b. Select a server to connect to. Do one of the following:
      - In the **Server Name** box, type the name or the address of the server machine.

        

        For a MySQL server, the port number defaults to 3306. You can specify the custom port number after a comma.

      - If you are using a Microsoft SQL server, select the server in the **Available Servers** list.

        If the server list does not include the server you are looking for, you should click **Update the List** to rescan your network. The list of database servers may not have a particular server even after your network is rescanned (if, for instance, the server blocks broadcasts). If the problem persists, contact your network administrator for assistance.

        

        If you use Microsoft SQL Server Express, the *(local)* option will not work even if the database server is running on the same machine. To use the server, start the SQL Browser service first, and then update the list of servers and select your server. Note that Microsoft SQL Server Express should not be used in a production environment due to its limitations.

   c. Select the authentication method to be used to connect to the database server. If you select the **SQL Server Authentication** option, specify an account with sufficient rights for creating the databases or making changes to them. Keep the following points in mind as you select an authentication method:
      - The selected authentication method must be supported by the database server. By default, Microsoft SQL Server 2005 is installed with Windows authentication disabled.
      - Windows authentication works only for a local Microsoft SQL Server or when both application and database servers are members of the same Windows domain.
      - Windows authentication doesn't work for a MySQL Server.
4. Click **Next**.
5. On the Database Configuration page, select the appropriate option as follows:
   - To create a new database, click **Create a new database** and then type the name in the **New database's name** box.
   - To connect to an existing database, do the following:
     a. Click **Connect to an existing database**.
     b. In the **Available databases on server** list, select a database name.
     c. Depending on the schema of the database you have selected, select the relevant check box to update, repair, or set up the database, if required.
     d. If you want to shrink data after the database maintenance, select the **Shrink data** check box.
6. Click **Next**.
7. On the Tenant Setup page, do the following:
   a. Configure the new tenant (named *Tenant*) that the Acumatica ERP Configuration Wizard created by default:
      - To rename the tenant, double-click the tenant name in the **Login Tenant Name** column, type a new tenant name, and press Enter.
      - If you want to fill the database with demo data, select *SalesDemo* in the **Insert Data** column.

b. Optional: Add more tenants if you want to create a multitenant Acumatica ERP instance. For more information about tenant setup, see *Managing Tenants*.

c. Optional: For a multitenant Acumatica ERP instance, if you want to restrict the list of tenants a user can see only to the tenants the user has access to, select the **Secure Tenant on Login Form** check box. In this case, the Tenant box does not appear on the Sign-In page by default and all users first authenticate themselves by entering their login and password.

d. Optional: For a multitenant Acumatica ERP instance, if you want to configure data sharing between tenants, select the **Advanced Settings** check box. For more information, see *Support of Multiple Tenants*.

8. Click **Next**.
9. On the Database Connection page, specify the authentication method that this instance of Acumatica ERP will use to connect to the database, which is one of the following options:
   - **Windows Authentication**: The Acumatica ERP Configuration Wizard will use the default anonymous user account used by Internet Information Services (IIS).

     

     Windows authentication doesn't work for a MySQL Server.

   - **SQL Server Authentication**: Select **Create new login** to create a new SQL login, or select **Use existing login** and specify an existing login. The login must have at least the following rights:
     - For a Microsoft SQL server, *read, write, execute,* and *ddl_admin*
     - For a MySQL server, *create*, *alter*, *drop*, *select*, *delete*, *insert*, *update*, *create temporary tables*, and *execute*
10. Click **Next**.
11. On the Instance Configuration page, specify the following options:
    a. **Instance Name**: Type a name for this Acumatica ERP instance.

    b. **Create Acumatica ERP Site**: Select this option button.

    c. **Local Path to the Instance**: Enter the path on the local computer to this application instance.
12. Click **Next**.
13. On the Web Site Configuration page, do the following:
    a. In the **Web Site Settings** section, configure the list of websites and create a virtual directory. To use the URL of the IIS default site (that is, http://www.domain.com), clear the **Create Virtual Directory** check box.

    b. In the **Application Pool Settings** section, specify the application pool. You may want to use a dedicated application pool to better isolate instances and fine-tune resources that are allocated for the instance by IIS. To specify the dedicated application pool, select one of the following options:
       - To create a new application pool, click **Create New Application Pool** and type the name in the **Application Pool Name** box.
       - To use an existing application pool, click **Use Existing Application Pool** and select the name of the application pool in the list of available application pools.

         The list of application pools includes all the application pools you can use to install Acumatica ERP from the list of pools configured in Web Server (IIS), either classic or integrated.

         

         Acumatica ERP employs the application pools that use one of the supported .NET Framework versions. For the list of supported .NET Framework versions, see *System Requirements for Acumatica ERP 2021 R1*.
14. Click **Next**.
15. On the Confirm Configuration page, do the following:

a. Check the configuration settings you have specified.

b. Optional. To make any changes, click **Back** to return to the required wizard page, and then make necessary changes.

c. If you want to save the configuration settings in an XML file on your computer, click **Save Configuration**.

d. Click **Finish** to deploy this Acumatica ERP instance.

To Change the Password at the First Sign-In

Every Acumatica ERP instance comes with an active default user account that you use to sign in to the system. You start working with Acumatica ERP by changing the password for the default user.

To Change the Password for the Default User

1. Launch the application instance you have deployed by doing one of the following:
   - On the Welcome page of the Acumatica ERP Configuration Wizard, click **Perform Application Maintenance**. On the Application Maintenance page, select the instance you have deployed and click **Launch**.
   - Use the link created automatically in the Acumatica ERP program group.
   - Navigate to `http://localhost/Instance_Name/` in the web browser, where *Instance_Name* is the name that you specified in the **Virtual Directory Name** box on the Web Site Configuration page during configuration. (If you used the default name for the virtual directory during the deployment of the instance, you would use the following URL: `http://localhost/AcumaticaERP/`.)

     

     The `http://localhost/Instance_Name/` URL works only on the local computer where you have installed Acumatica ERP Tools. To access the Acumatica ERP instance remotely, use the fully qualified domain name (FQDN) of the server instead of *localhost* in the URL.
2. On the Sign-In page, type the following default credentials:
   - **My User Name**: *admin*
   - **My Password**: *setup*
3. Click **Sign In**.
4. Type the new password in the **New Password** and **Confirm Password** boxes.
5. If your Acumatica ERP instance is configured so that you need to agree to the terms of the Acumatica User Agreement, do the following:
   a. Click the **Acumatica User Agreement** link, and read the user agreement.
   b. Select **Check here to indicate that you have read and agree to the terms of the Acumatica User Agreement**, if you agree to these terms. If you don't agree to the terms of the user agreement, you cannot start using the software.
6. Click **Sign In**.

Setting Up Acumatica Self-Service Portal

Acumatica Self-Service Portal is designed to be the site where your customers can view all the relevant information about their interaction with your company as a vendor and perform common activities online.

To give your customers limited access to your Acumatica ERP instance, you deploy a Self-Service Portal instance connected to your Acumatica ERP instance. For details, see *To Deploy a Self-Service Portal Instance*.

If you deploy a multitenant Acumatica ERP instance, after you deploy the Self-Service Portal instance, you must specify the tenant that the Self-Service Portal users can access. For details, see *To Specify the Tenant Available for Self-Service Portal Users*.

If you want different tenants to be available through Self-Service Portal, you must deploy a Self-Service Portal instance for each tenant.

If you deploy two or more Self-Service Portal sites that run as a cluster with a load balancer, you must specify for each portal site the identifier of the group of portal sites that belong to the same cluster. For details, see *To Specify the Group of Self-Service Portal Sites*.

If you have two or more separate portal sites that do not belong to the same cluster, the identifier has to be different for each portal site.

Related Links

- *System Requirements for Acumatica ERP 2021 R1*
- *To Install the Acumatica ERP Tools*
- *To Deploy an Acumatica ERP Instance*
- *Using the Command-Line Tool*

To Deploy a Self-Service Portal Instance

After you install the Acumatica ERP instance, you use the Acumatica ERP Configuration Wizard to deploy the Self-Service Portal instance and connect it to the database used by the Acumatica ERP instance. By doing this, you can give your customers limited access to the Acumatica ERP instance.

To Deploy a Self-Service Portal Instance

1. Run the Acumatica ERP Configuration Wizard. Select **Start > Acumatica > Acumatica ERP Configuration**.
2. On the Welcome page, click **Deploy New Application Instance**.
3. On the Database Server Connection page, specify the database server that is used by the Acumatica ERP instance:
   a. In the **Server Type** box, select the server type. The following options are available: *Microsoft SQL Server* or *MySQL Server*.
   b. Select a server to connect to. Do one of the following:
      - In the **Server Name** box, type the name or the address of the server machine.

For a MySQL server, the port number defaults to 3306. You can specify the custom port number after a comma.

- If you are using a Microsoft SQL server, select the server in the **Available Servers** list.

  If the server list does not include the server you are looking for, you should click **Update the List** to rescan your network. The list of database servers may not have a particular server even after your network is rescanned (if, for instance, the server blocks broadcasts). If the problem persists, contact your network administrator for assistance.

  > ⚠ If you use Microsoft SQL Server Express, the *(local)* option will not work even if the database server is running on the same machine. To use the server, start the SQL Browser service first, and then update the list of servers and select your server. Note that Microsoft SQL Server Express should not be used in a production environment due to its limitations.

c. Select the authentication method to be used to connect to the database server. If you select the **SQL Server Authentication** option, specify an account with sufficient rights for creating the databases or making changes to them. Keep the following points in mind as you select an authentication method:

- The selected authentication method must be supported by the database server. By default, Microsoft SQL Server 2005 is installed with Windows authentication disabled.
- Windows authentication works only for a local Microsoft SQL Server or when both application and database servers are members of the same Windows domain.
- Windows authentication doesn't work for a MySQL Server.

4. Click **Next**.
5. On the Database Configuration page, connect to the database that is used by the Acumatica ERP instance:
   a. Click **Connect to an existing database**.
   b. In the **Available databases on server** list, select the database that is used by the Acumatica ERP instance.
   c. If the schema of the database you have specified is outdated, select the **Update database** check box.
   d. If you want to shrink data after the database maintenance, select the **Shrink data** check box.
6. Click **Next**.
7. On the Tenant Setup page, select the tenants used by the Acumatica ERP instance and click **Next**.
8. On the Database Connection page, specify the authentication method that the instance of Self-Service Portal will use to connect to the database, which is one of the following options:
   - **Windows Authentication**: The Acumatica ERP Configuration Wizard will use the default anonymous user account used by Internet Information Services (IIS).

     > ⚠ Windows authentication doesn't work for a MySQL Server.

   - **SQL Server Authentication**: Select **Create new login** to create a new SQL login, or select **Use existing login** and specify an existing login. The login must have at least the following rights:
     - For a Microsoft SQL server, *read, write, execute,* and *ddl_admin*
     - For a MySQL server, *create*, *alter*, *drop*, *select*, *delete*, *insert*, *update*, *create temporary tables*, and *execute*
9. Click **Next**.
10. On the Instance Configuration page, specify the following options:
    a. **Instance Name**: Type a name for this Self-Service Portal instance.
    b. **Create Portal**: Select this option button.

c. **Local Path to the Instance**: Enter the path on the local computer to this application instance.

11. Click **Next**.
12. On the Web Site Configuration page, do the following:
    a. In the **Web Site Settings** section, configure the list of websites and create a virtual directory. To use the URL of the IIS default site (that is, http://www.domain.com), clear the **Create Virtual Directory** check box.
    b. In the **Application Pool Settings** section, specify the application pool. You may want to use a dedicated application pool to better isolate instances and fine-tune resources that are allocated for the instance by IIS. To specify the dedicated application pool, select one of the following options:
       - To create a new application pool, click **Create New Application Pool** and type the name in the **Application Pool Name** box.
       - To use an existing application pool, click **Use Existing Application Pool** and select the name of the application pool in the list of available application pools.

         The list of application pools includes all the application pools you can use to install Acumatica ERP from the list of pools configured in Web Server (IIS), either classic or integrated.

         

         Acumatica ERP employs the application pools that use one of the supported .NET Framework versions. For the list of supported .NET Framework versions, see *System Requirements for Acumatica ERP 2021 R1*.
13. Click **Next**.
14. On the Confirm Configuration page, do the following:
    a. Check the configuration settings you have specified.
    b. Optional. To make any changes, click **Back** to return to the required wizard page, and then make necessary changes.
    c. If you want to save the configuration settings in an XML file on your computer, click **Save Configuration**.
    d. Click **Finish** to deploy this Acumatica ERP instance.

If you use a multitenant configuration, now you must specify the tenant that the Self-Service Portal instance will be connected to, as described in *To Specify the Tenant Available for Self-Service Portal Users*.

To Specify the Tenant Available for Self-Service Portal Users

If you use a multitenant Acumatica ERP configuration, after you deploy a Self-Service Portal instance, you must specify the tenant that will be available for the Self-Service Portal users.

To Configure the Tenants Available for Self-Service Portal Users

1. Open the web.config file for the Self-Service Portal instance. This file is usually located in **%Program Files%\Acumatica ERP\<instance name>**, where *<instance name>* is the name of the Self-Service Portal instance site.
2. In the file, find the providers section, which has the following settings:

```
<add name="PXSqlDatabaseProvider" ... companyID="" .../>
```

3. Change the following key value:

```
companyID="x"
```

where *x* is the ID of the tenant you want to make available to the Self-Service Portal users.

4. Save the web.config file; this automatically restarts the website.

To Specify the Group of Self-Service Portal Sites

If you use a Self-Service Portal configuration when two or more Self-Service Portal sites run as a cluster with a load balancer, you must specify for each portal site the identifier of the group of portal sites that belong to the same cluster.

To Specify the Group of Self-Service Portal Sites

1. Open the web.config file for the Self-Service Portal instance. This file is usually located in **%Program Files%\Acumatica ERP\<instance name>**, where *<instance name>* is the name of the Self-Service Portal instance site.
2. In the file, find the appSettings section.
3. For the PortalSiteID setting in that section, specify the identifier of the group of portal sites that belong to the same cluster, as shown in the following example:

```
<add key="PortalSiteID" value="Retail" />
```

> ⚠ By default, the *CustomerPortal-1* value is specified in the PortalSiteID setting for each newly deployed portal site.

4. Save the web.config file; this automatically restarts the website.

Installing Acumatica ERP in a Data Center

You can install Acumatica ERP in a data center in which the system and the associated databases are hosted by the hosting provider.

With most host providers, you follow the installation procedure described in *Installing Acumatica ERP Locally*. If you choose to deploy Acumatica ERP on Windows Azure as a service, you need to create the Acumatica ERP Service package and deploy it on Windows Azure, as described in a later section of this document.

Installing Acumatica ERP in a Data Center

You can install Acumatica ERP on a hosting or cloud services provider because these providers provide persistent, durable storage in the cloud.

If you are provided with a web service where you can launch an operating system with Microsoft SQL Server available, follow the installation procedure described in *Installing Acumatica ERP Locally*.

Deploying the Acumatica ERP Service on Windows Azure

You can deploy Acumatica ERP as a cloud service in Windows Azure. In this case, you create an Acumatica ERP Service package and upload it to the cloud service. For details, see *Deploying the Acumatica ERP Service on Windows Azure*.

Installing Acumatica ERP on Amazon Web Services with Independent Database Server

You can install the Acumatica ERP Tools on an Amazon Elastic Compute Cloud (Amazon EC2) virtual machine and use the Amazon Relational Database Service (Amazon RDS) to host the databases. For detail, see *Installing Acumatica ERP on Amazon Web Services*.

Related Links

- *System Requirements for Acumatica ERP 2021 R1*
- *Windows Azure*
- *Amazon Web Services*

Deploying the Acumatica ERP Service on Windows Azure

Acumatica ERP can be deployed on Windows Azure, which is a cloud services platform hosted through Microsoft data centers. The platform includes the Windows Azure operating system and a set of developer services.

Also, you can access the storage services that are provided through the Windows Azure Management Portal. To use them, you must have a storage account.

System Requirements

Deploying Acumatica ERP on Microsoft Azure imposes additional limitations to Acumatica ERP system requirement, described in *System Requirements for Acumatica ERP 2021 R1*.

The performance of Microsoft Azure SQL databases may not satisfy the requirements of midsize or large organizations. If daily volumes of your company exceed a thousand transactions, we recommend that you use Microsoft Azure's virtual machine with the CPU frequency equals 3 GHz or higher and your own dedicated SQL server.

Before You Begin

To deploying Acumatica ERP instance on Windows Azure, you will need the following:

- An Azure account. For more information, see *Microsoft Azure*.
- An SSL service certificate that has been signed by a Certificate Authority, a trusted third-party who issues certificates.

  If you do not already have one, you will need to obtain one from a company that sells SSL certificates. If you have the certificate imported in the system, you can export the certificate into a PFX file by using the Internet Information Services (IIS) Manager or OpenSSL command-line tools.

Deployment

To deploy the Acumatica ERP Service on the Windows Azure platform, you perform the following steps:

1. Download the service package file *To Download the Configuration Package*
2. Prepare for deployment on Windows Azure. For more information, see *To Prepare for Deployment on Windows Azure*.
3. Set up the database options and create an Acumatica ERP Service package on your local computer. For the detailed procedure, see *To Create an Acumatica ERP Service Package*.

4. Deploy the Acumatica ERP Service package on Windows Azure. For the detailed procedure, see *To Deploy the Acumatica ERP Service on Windows Azure*.

Related Links

- *System Requirements for Acumatica ERP 2021 R1*
- *Windows Azure*

To Download the Configuration Package

Before you begin installing Acumatica ERP as a service on Windows Azure, you need to get the Azure service package file that you can download on the *Partner Portal*. The package file should correspond to the version of Windows Azure that you purchased as shown in the following table.

Azure Deployment	Acumatica ERP Edition	Configuration Package
Small	Standard	SmallService.cspkg
Medium	Advanced	MediumService.cspkg
Large	Enterprise	LargeService.cspkg
90 day free trial	Unlicensed	SmallService.cspkg

To Download the Configuration Package

- On the **Downloads** tab of the Partner Portal, click on the service package you plan to use.

The Azure service package file (.cspkg) is downloaded on your computer.

To Prepare for Deployment on Windows Azure

Before you deploy an Acumatica ERP instance on Windows Azure, you configure your Windows Azure account.

To prepare for deployment, perform the following steps:

1. Create a new cloud service on Windows Azure as follows:
   a. In **Management Portal**, click **New**, **Cloud Service**, and then **Quick Create**.
   b. In **URL**, enter your company name to use in the public URL for accessing your cloud service in production deployments. The URL format for production deployments is http://*myCompany*.cloudapp.net, where *myCompany* is the company name.
   c. In **Region/Affinity Group**, select **Acumatica Group**.
   d. Click **Create Cloud Service**.
2. Add an SSL service certificate to the certificate store on Windows Azure.

   Before you can use a Windows Azure service certificate, you must upload it to a cloud service. Export a new certificate into a PFX file by using the Internet Information Services (IIS) Manager or OpenSSL command-line tools, and then upload this file to Windows Azure by using the Windows Azure Management Portal or the Windows Azure Service Management API. The uploaded certificate can then be used by a service or stored in the hosted services certificate store. To add the certificate, do the following:

a. In **Management Portal**, click **Cloud Services**. Then click the name of the cloud service you created in Step 1 to open the dashboard.

b. Open the **Certificates** page and click **Add new certificate**. The **Add a Certificate** dialog box opens.

c. In **Certificate file**, use **Browse** to select the certificate (PFX file) to use.

d. In **Password**, enter the private key for the certificate.

e. Click **OK**.

f. Copy and paste the thumbprint of the certificate into a file; you will need it during a later step, when you're configuring database settings.

3. Configure remote access to the role instance as follows:

a. In **Management Portal**, select **Cloud Services**. Then click the name of the cloud service you created in Step 1 to open the dashboard.

b. Open the Configure page for the cloud service, and click **Remote**.

c. On the Configure Remote Desktop Settings page, make the following changes:

- Select the **Enable remote desktop** check box.
- Create an account to use in Remote Desktop connections to the role instances.
- In the **Certificates** dialog box, select the certificate you uploaded in the previous step.

d. Click **OK**.

e. Connect to a role instance as follows:

a. Click **Instances** to open the Instances page.

b. Click the role instance that has Remote Desktop configured to select the instance.

c. Click **Connect**, and follow the instructions to open the desktop of the virtual machine.

4. Create a SQL database on Windows Azure:

a. Click **+NEW** at the bottom of the page.

b. Click **Data Services**.

c. Click **SQL Database**.

d. Click **Custom Create**.

e. In **Name** box, enter a name for the new database.

f. In the **Edition** box, select the *WEB* edition.

g. Select the **Subscription** box, depending on your company contract.

h. In the **Service Tiers** and **Performance Level** boxes, choose the service tier you want to use.

For running Acumatica ERP you should select at least the *Standard S2* service tier.

j. In the **Collation** box, specify the collation for your database. The *SQL_Latin1_General_CP1_CI_AS* collation is selected by default.

k. In the **Server** box, select *New SQL Database Server*.

l. Click the check mark to go to the next page.

m. In the **Server Settings** box, enter a SQL Server authentication login name and password.

n. Click the check mark at the bottom of the page when you are finished.

To Create an Acumatica ERP Service Package

You install the Acumatica ERP Tools on the local computer and use the Acumatica ERP Configuration Wizard to set up database options and create an Acumatica ERP Service package as follows:

To Set Up Database Options and Create an Acumatica ERP Service Package

1. Install the Acumatica ERP Tools on the local computer, as described in *To Install the Acumatica ERP Tools*.
2. Open the Acumatica ERP Configuration Wizard.
3. On the Welcome page of the Acumatica ERP Configuration Wizard, click **Generate Azure Configuration File**.
4. On the Database Server Connection page, enter the host name of the Microsoft Azure SQL server and the administrator account credentials.
5. Click **Next**.
6. On the Database Configuration page, do one of the following:
   - To create a new database, click **Create a new database** and then type the name in the **New database's name** box.
   - To connect to an existing database, do the following:
     a. Click **Connect to an existing database**.
     b. In the **Available databases on server** list, select a database name.
     c. Depending on the schema of the database you have selected, select the relevant check box to update, repair, or set up the database.
     d. If you want to shrink data after the database maintenance, select the **Shrink data** check box.
7. On the Tenant Setup page, do the following:
   a. Do the following to configure the new tenant (named *Tenant*) that the Acumatica ERP Configuration Wizard created by default:
      a. To rename the tenant, double-click the tenant name in the **Login Tenant Name** column, type a new tenant name, and press Enter.
      b. If you want to fill the database with demo data, select *SalesDemo* in the **Insert Data** column.
   b. Optional: If you want to create a multitenant Acumatica ERP instance, add more tenants. For more information about tenant setup, see *Managing Tenants*.
   c. Optional: For a multitenant Acumatica ERP instance, if you want to restrict the list of tenants a user can see only to the tenants the user has access to, select the **Secure Tenant on Login Form** check box. In this case, the **Tenant** box does not appear on the Welcome screen by default and all users first authenticate themselves by entering their login and password.
   d. Optional: For a multitenant Acumatica ERP instance, if you want to configure data sharing between tenants, select the **Advanced Settings** check box. For more information, see *Support of Multiple Tenants*.
8. Click **Next**.
9. Optional: On the Tables Configuration page, you can specify whether you want the database tables to be shared by different tenants, and then click **Next**.

> This page is displayed only if you have selected the **Advanced Settings** check box on the previous page.

10. On the Instance Configuration page, specify the following options:
    a. **Instance Name**: Enter a name for this application instance of Acumatica ERP.
    b. **Local Path to the Instance**: Enter the local path to the configuration files folder.
    c. **SSL Certificate Thumbprint**: Enter the thumbprint of the SSL service certificate that you saved to a text file in *To Prepare for Deployment on Windows Azure*.
11. Click **Next**.
12. On the Confirm Configuration page, verify the configuration settings, and then click **Finish**.
13. On the Confirm Configuration page, do the following:
    a. Check the configuration settings you have specified.
    b. Optional. To make any changes, click **Back** to return to the required wizard page, and then make necessary changes.
    c. Click **Finish**.

The service package (.cspkg) file is generated and stored on your computer.

To Deploy the Acumatica ERP Service on Windows Azure

To deploy the Acumatica ERP Service on Windows Azure, use the Windows Azure Management Portal to upload the following files:

- The service package file (.cspkg) that you downloaded from the Partner Portal. For more information, see *Deploying the Acumatica ERP Service on Windows Azure*.
- The service configuration file (.cscfg) you created in *To Create an Acumatica ERP Service Package*

To Deploy the Packaged Acumatica ERP Service on Windows Azure

1. In the **Management Portal**, click **Cloud Services**. Then click the name of the cloud service to open the dashboard.
2. Click **Quick Start** to open the Quick Start page.
3. Click **New Production Deployment** or **New Staging Deployment**.
4. In **Upload a Package**, make the following changes:
    a. In **Deployment name**, enter a name for the new deployment.
    b. In **Package**, use **Browse** to select the service package file (.cspkg) to use.
    c. In **Configuration**, use **Browse** to select the service configuration file (.cscfg) to use.
5. Click OK (check mark) to begin the cloud service deployment.

Uploading the service package file and the service configuration file may take several minutes. You can track the upload progress on the Azure Management Portal.

> For more information about deploying a cloud service, see *How to Create and Deploy a Cloud Service* on Microsoft Azure portal.

When you create an application in Windows Azure, Windows Azure provides a friendly subdomain on the cloudapp.net domain so your users can access your application by using a URL such as http://

<*myUrl*>.cloudapp.net. However, you can also expose your application and data on your own domain name. For more information, see *Configuring a custom domain name for a Windows Azure cloud service or storage account* on Microsoft Azure portal.

Installing Acumatica ERP on Amazon Web Services

You can launch Acumatica ERP on Amazon Web Services (AWS). In this case, you use the Amazon Elastic Compute Cloud (Amazon EC2) to host the web server and Amazon Relational Database Service (Amazon RDS) to host the databases. This section includes our recommendations for configuring the EC2 and RDS instances and the details about deploying Acumatica ERP on AWS.

Before You Begin

Before you start deploying Acumatica ERP on Amazon Web Services, make sure you have completed the following tasks:

- Sign up for Amazon Web Services.
- Create a key pair.
- Create a security group that will specify your EC2 instance, which can access your RDS instance.

To Launch Acumatica ERP on Amazon Web Services

1. Launch an Amazon EC2 instance. For more information, see *To Launch an Amazon EC2 Instance*.
2. Create a database instance by using Amazon RDS. For details, see *To Create a Database Instance on Amazon RDS*.
3. Install Acumatica ERP Tools and deploy a new application instance. For more information, see *To Deploy Acumatica ERP on Amazon EC2*.

Related Links

- *Amazon Web Services*

To Launch an Amazon EC2 Instance

When you launch your Amazon EC2 instance, you secure it by specifying a key pair and security group. When you connect to your instance, you must specify the private key of the key pair that you specified when launching your instance.

To Launch an Amazon EC2 Instance

1. Sign in to the AWS Management Console and open the Amazon EC2 console.
2. In the top right corner of the Amazon EC2 console, select the region for your EC2 instance.

   

   You must select the same region for your EC2 and RDS instances and for the key pair you use to sign in to your instances.

3. From the console dashboard, click **Launch Instance**.
4. On the Select an Amazon Machine Image (AMI) page, select the *Windows Server 2012 Base 64-bit* AMI.

5. On the Select an Instance Type page, select the *m1.medium* hardware configuration for your instance.
6. On the Security Groups page, select the security group that you've prepared to launch Acumatica ERP.
7. On the Review Instance Launch page, review the settings for your instance, and then click **Launch**.
8. In the **Select an existing key pair or create a new key pair** dialog box, select *Choose an existing key pair*, and then select the prepared key pair.
9. When you are ready, select the acknowledgment check box, and then click **Launch Instances**.

   A confirmation page lets you know that your instance is launching.
10. Click **View Instances** to close the confirmation page and return to the console.
11. On the Instances page, view the status of your instance. It takes a short time for an instance to launch. When you launch an instance, its initial state is *pending*. After the instance starts, its state changes to *running*, and it receives a public DNS name.
12. On the Instances screen, select the instance and click **Connect**.
13. In the **Connect to Your Instance** dialog box:
    a. Select the prepared key.
    b. Download the Remote Desktop file.
14. Run the Remote Desktop file you've downloaded in Step 13 to access the web server you have launched.
15. For the operating system of the virtual machine, turn on the Microsoft Internet Information Services (IIS) and make sure the required IIS features are turned on, as described in *System Requirements for Acumatica ERP 2021 R1*.

To Create a Database Instance on Amazon RDS

After you set up the EC2 instance, you can create a database instance by using the RDS console.

To Create a Database Instance on Amazon RDS

1. Sign in to the AWS Management Console and open the Amazon RDS console.
2. In the top right corner of the Amazon RDS console, select the region in which you want to create the database instance.

   ⚠ You must select the same region for your EC2 and RDS instances and for the key pair you use to sign in to your instances.
3. In the navigation pane, click **Instances**.
4. Click **Launch DB Instance** to start the Launch DB Instance wizard.

   The wizard opens on the Engine Selection page.
5. If you want to use MS SQL database, do the following:
   a. In the **Launch DB Instance Wizard** window, click the **Select** button for the *MS SQL Server Web Edition*.
   b. On the DB Instance Details page, specify your database instance information, including the following settings:
      - **DB Instance Class**: *db.m1.medium*

- **Allocated Storage**: *20 GB*
- **DB Instance Identifier**
- **Master User Name**
- **Master Password**

6. If you want to use MySQL database, do the following:
   a. In the **Launch DB Instance Wizard** window, click the **Select** button for the *MySQL Community Edition*.
   b. On the DB Instance Details page, specify your database instance information, including the following settings:
      - **DB Engine**: as specified in *System Requirements for Acumatica ERP 2021 R1*
      - **DB Instance Class**: *db.m1.medium*
      - **Allocated Storage**: *20 GB*
      - **Multi-AZ Deployment**: *No*
      - **DB Instance Identifier**
      - **Master User Name**
      - **Master Password**
7. Click **Next Step**.
8. On the Additional Configuration page, provide the additional information that RDS uses to launch the SQL Server database instance, including the following setting:
   - **DB Security Groups**: Select the prepared security group you used when launching the EC2 instance.
9. Click **Next Step**.
10. On the Management Options page, you can specify backup and maintenance options for your database instance.
11. Click **Next Step**.
12. On the Review page, review the options for your database instance. When you're certain of all the settings, click **Launch DB Instance**.
13. On the final page of the wizard, click **Close**.
14. On the RDS console, the new database instance appears in the list of instances. The database instance will have a status of *creating* until it is created and ready for use. When the state changes to *available*, you can connect to the database instance. Depending on the database instance class and store allocated, it could take several minutes for the new instance to be available.
15. On the RDS console, select the database and check the DNS name of the instance in the **Endpoint** box; you will need this name during Acumatica ERP installation.

To Deploy Acumatica ERP on Amazon EC2

After you launch the Amazon EC2 and RDS instances, you can install Acumatica ERP Tools and deploy application instances.

To Deploy Acumatica ERP on the Amazon EC2 Instance

1. Use the Remote Desktop Connection to connect to the web server running on your Amazon EC2 instance.
2. Copy the Acumatica ERP installation package to the web server.

3. Install the Acumatica ERP Tools, as described in *To Install the Acumatica ERP Tools*.
4. On the Welcome page of the Acumatica ERP Configuration Wizard, click **Deploy New Application Instance**.
5. On the Database Server Connection page, specify the database server that will be used by the Acumatica ERP instance:
   a. In the **Server Type** box, select the server type you used to deploy the database on Amazon RDS. The following options are available: *Microsoft SQL Server* or *MySQL Server*.
   b. In the **Server Name** box, enter the DNS name of the Amazon RDS database instance you've launched. Also, you can specify a custom port number after a comma.

      

      If you cannot connect to the server, check the security groups you've selected for the EC2 and RDS instances: You must select the same group for both services.

      

      For a MySQL server, the port number defaults to 3306.

   c. Select the **SQL Server Authentication** method, and specify the login that you created while you set up the Amazon RDS database instance (in Step 5 or 6 of the *To Create a Database Instance on Amazon RDS* procedure, depending on the database type):
      - **Login**: *Master User Name*
      - **Password**: *Master Password*
6. Click **Next**.
7. On the Database Configuration page, connect to the database that you've launched on Amazon RDS. Do the following:
   a. Click **Connect to an existing database**.
   b. In the **Available databases on server** list, enter the database name.
   c. Depending on the schema of the database you have selected, select the relevant check box to update, repair, or set up the database, if required.
   d. If you want to shrink data after the database maintenance, select the **Shrink data** check box.
8. Click **Next**.
9. On the Tenant Setup page, do the following:
   a. Configure the new tenant, named *Tenant*, that the Acumatica ERP Configuration Wizard created by default:
      - To rename the tenant, double-click the tenant name in the **Login Tenant Name** column, type a new tenant name, and press Enter.
      - If you want to fill the database with demo data, select *SalesDemo* in the **Insert Data** column.
   b. Optional: Add more tenants if you want to create a multitenant Acumatica ERP instance. For more information about tenant setup, see *Managing Tenants*.
   c. Optional: For a multitenant Acumatica ERP instance, if you want to restrict the list of tenants a user can see only to the tenants the user has access to, select the **Secure Tenant on Login Form** check box. In this case, the Tenant box does not appear on the Sign-In page by default and all users first authenticate themselves by entering their login and password.
   d. Optional: For a multitenant Acumatica ERP instance, if you want to configure data sharing between tenants, select the **Advanced Settings** check box. For more information, see *Support of Multiple Tenants*.
10. Click **Next**.

11. Optional: On the Tables Configuration page (which is displayed only if you have selected the **Advanced Settings** check box on the Tenant Setup page), configure data sharing between tenants, and then click **Next**.

> ⚠ Table configuration is a dangerous operation that can result in database corruption. Any changes you make are at your own risk. If you configure tables, be sure to first back up the database.

12. On the Database Connection page, specify the authentication method that this instance of Acumatica ERP will use to connect to the database. Do the following:
    a. Select the **SQL Server Authentication** authentication method.
    b. Select **Use Existing Login** option and specify the login you created while you set up the Amazon RDS database instance (in Step 5 or 6 of the *To Create a Database Instance on Amazon RDS* procedure, depending on the database type):
       - **Login**: *Master User Name*
       - **Password**: *Master Password*
13. Click **Next**.
14. On the Instance Configuration page, specify the following options:
    - **Instance Name**: Type a name for this Acumatica ERP instance.
    - **Create Portal**: Leave the check box cleared.
    - **Local Path to the Instance**: Enter the path on the local computer to this application instance.
15. Click **Next**.
16. On the Web Site Configuration page, do the following:
    a. In the **Web Site Settings** section, configure the list of websites and create a virtual directory. To use the URL of the Internet Information Services (IIS) default site (that is, http://www.domain.com), clear the **Create Virtual Directory** check box.
    b. In the **Application Pool Settings** section, specify the application pool. You may want to use a dedicated application pool to better isolate instances and fine-tune resources that are allocated for the instance by IIS. To specify the dedicated application pool, select one of the following options:
       - To create a new application pool, click **Create New Application Pool** and type the name in the **Application Pool Name** box.
       - To use an existing application pool, click **Use Existing Application Pool** and select the name of the application pool in the list of available application pools.

         The list of application pools includes all the application pools you can use to install Acumatica ERP from the list of pools configured in Web Server (IIS), either classic or integrated.

         > ⚠ Acumatica ERP employs the application pools that use one of the supported .NET Framework versions. For the list of supported .NET Framework versions, see *System Requirements for Acumatica ERP 2021 R1*.
17. Click **Next**.
18. On the Confirm Configuration page, do the following:
    a. Check the configuration settings you have specified.
    b. Optional: To make any changes, click **Back** to return to the required wizard page, and then make necessary changes.
    c. If you want to save the configuration settings in an XML file on your computer, click **Save Configuration**.

d. Click **Finish** to deploy this Acumatica ERP instance.

Installing Acumatica Framework

Acumatica Framework is a Web 2.0 application development platform that you use to develop business applications, such as enterprise resource planning (ERP) systems.

Installing Acumatica Framework

To install Acumatica Framework, perform these steps:

1. Install the Acumatica Framework Tools on a server computer. For more information, see *To Install the Acumatica Framework Tools*.
2. Deploy an Acumatica Framework instance on the server by using the Acumatica Framework Configuration Wizard. For more information, see *To Deploy an Acumatica Framework Instance*.
3. Start working with Acumatica Framework by changing the password of the default user. For details, see *To Change the Password at the First Sign-In*.

Installing Acumatica Framework Templates

For details on the installation of Acumatica Framework Templates, see *To Install Acumatica Framework Templates*.

Using Acumatica Framework Tools

You use the Acumatica Framework Configuration Wizard to deploy the Acumatica Framework instances.

Acumatica Framework Tools include the Acumatica Framework Configuration Wizard and the Acumatica Report Designer.

The Acumatica Framework Configuration Wizard gives you the ability to deploy new application instances and perform application and database maintenance.

The Acumatica Report Designer provides visual tools that you can use to design custom reports for Acumatica ERP. For more information, see *Acumatica Report Designer Guide*.

To Install the Acumatica Framework Tools

To install Acumatica Framework, run the Acumatica Framework installation program, and follow the instructions of the Acumatica Framework Installer wizard:

1. On the Welcome page, click **Next**.
2. On the License Agreement page, read the license agreement. To accept the license agreement, select the **I accept the terms in the License Agreement** check box.
3. Click **Next**.
4. On the Main Software Configuration page, select any of the following check boxes:
   - **Launch the Configuration Wizard (Recommended)**: Select this check box if you want to deploy Acumatica Framework instances once you install Acumatica Framework tools.
   - **Install Report Designer**: Select this check box if you want to install the optional Acumatica Report Designer component. For more information, see *Acumatica Report Designer Guide*.
5. Click **Next**.

6. On the Destination Folder page, specify the location where you want to install Acumatica Framework Tools.
7. Click **Next**.
8. On the Ready to install Acumatica ERP2021 R1 page, click **Install**.
9. After the installation has been completed, click **Finish**.

> ⚠ If you did not select the **Launch the Acumatica Framework Configuration Wizard** check box in Step 4, you can run Acumatica Framework Configuration Wizard anytime by selecting **Start > Acumatica > Acumatica Framework Configuration**.

To Deploy an Acumatica Framework Instance

During this step, you deploy an instance by using the Acumatica Framework Configuration Wizard.

To deploy a new Acumatica Framework instance, do the following:

1. Run the Acumatica Framework Configuration Wizard. For example, select **Start > Acumatica > Acumatica Framework Configuration**.
2. On the Welcome page of the wizard, do one of the following:
   - Click **Deploy New Instance of Acumatica Application Template** to deploy a new application instance or an application instance with training templates.
   - Click **Deploy New Instance of Acumatica Training Application** to deploy a training application instance of Acumatica Framework with all demo data.
3. On the Database Server Connection page, specify the database server that will be used by the Acumatica Framework instance:
   a. In the **Server Type** box, choose the server type. The following options are available: *Microsoft SQL Server* or *MySQL Server*.
   b. Select a server to connect to. Do one of the following:
      - In the **Server Name** box, type the name or the address of the server machine. Also, you can specify the custom port number after a comma.

        > ⚠ For a MySQL server, the port number defaults to 3306.

      - If you are using a Microsoft SQL server, select the server in the **Available Servers** list.

        If the server list does not include the server you are looking for, you should click **Update the List** to rescan your network. The list of database servers may not have a particular server even after your network is rescanned (if, for instance, the server blocks broadcasts). If the problem persists, contact your network administrator for assistance.

        > ⚠ If you use Microsoft SQL Server Express, the *(local)* option will not work even if the database server is running on the same machine. To use the server, start the SQL Browser service first, and then update the list of servers and select your server. Note that Microsoft SQL Server Express should not be used in a production environment due to its limitations.

   c. Select the authentication method to be used to connect to the database server. If you select the **SQL Server Authentication** option, specify an account with sufficient rights for creating the databases or making changes to them. Keep the following points in mind as you select an authentication method:

- The selected authentication method must be supported by the database server. By default, Microsoft SQL Server 2005 is installed with Windows authentication disabled.
- Windows authentication works only for a local Microsoft SQL Server or when both application and database servers are members of the same Windows domain.
- Windows authentication doesn't work for a MySQL Server.

4. Click **Next**.
5. On the Database Configuration page, select the appropriate option as follows:
   - To create a new database, click **Create a new database**, and then type the name in the **New database's name** box.
   - To connect to an existing database, do the following:
     a. Click **Connect to an existing database**.
     b. In the **Available databases on server** list, click a database name.
     c. Depending on the schema of the database you have selected, select the relevant check box to update, repair, or set up the database. To shrink data after the database maintenance, select the **Shrink data** check box.
6. Click **Next**.
7. On the Database Connection page, specify the authentication method that this application instance of Acumatica Framework will use to connect to the database, which is one of the following options:
   - **Windows Authentication**: The Acumatica Framework Configuration Wizard will use the default anonymous user account used by Internet Information Services (IIS).

     

     Windows authentication doesn't work for a MySQL Server.
   - **SQL Server Authentication**: Select **Create new login** to create a new SQL login, or select **Use existing login** and specify an existing login. The login must have at least the following rights:
     - For a Microsoft SQL server, *read, write, execute,* and *ddl_admin*
     - For a MySQL server, *create*, *alter*, *drop*, *select*, *delete*, *insert*, *update*, *create temporary tables*, and *execute*
8. Click **Next**.
9. On the Instance Configuration page, specify the following options:
   - **Instance Name**: Type a name for this Acumatica Framework instance.
   - **Local Path to the Instance**: Enter the path on the local computer to this application instance.
10. Click **Next**.
11. On the Web Site Configuration page, do the following:
    - Configure the list of websites and create a virtual directory. To use the URL of the IIS default site (that is, http://www.domain.com), clear the **Create Virtual Directory** check box.
    - Specify the application pool. You may want to use a dedicated application pool to better isolate instances and fine-tune resources that are allocated for the instance by IIS. To specify the dedicated application pool, select one of the following options:
      - To create a new application pool, click **Create New Application Pool** and type the application pool name.
      - To use the existing application pool, click **Use Existing Application Pool** and select the name of the application pool.

        The list of application pools includes all the application pools you can use to install Acumatica Framework from the list of pools configured in Web Server (IIS), either classic or integrated.

> Acumatica Framework employs the application pools that use one of the supported .NET Framework versions. For the list of supported .NET Framework versions, see *System Requirements for Acumatica ERP 2021 R1*.

12. Click **Next**.
13. On the Confirm Configuration page, do the following:
    a. Check the configuration settings you have specified.
    b. Optional. To make any changes, click **Back** to return to the required wizard page, and then make necessary changes.
    c. To save the configuration settings in an XML file on your computer, click **Save Configuration**.
    d. Click **Finish** to deploy this Acumatica Framework instance.

> You can deploy an Acumatica Framework instance by using the command line. For more information, see *Using the Command-Line Tool*.

To Change the Password at the First Sign-In

Every Acumatica Framework instance comes with an active default user account that you use to sign in to the system. You start working with the Acumatica Framework instance by changing the password for the default user.

To Change the Password for the Default User

1. Launch the application instance you have deployed by doing one of the following:
   - On the Welcome page of the Acumatica Framework Configuration Wizard, click **Perform Application Maintenance**. On the Application Maintenance page, select the instance you have deployed and click **Launch**.
   - Use the link created automatically in the Acumatica Framework program group.
   - Navigate to `http://localhost/Instance_Name/` in the web browser, where *Instance_Name* is the name that you specified in the **Virtual Directory Name** box on the Web Site Configuration page during configuration. (If you used the default name for the virtual directory during the deployment of the instance, you would use the following URL: `http://localhost/AcumaticaFramework/`.)

     > The `http://localhost/Instance_Name/` URL works only on the local computer where you have installed Acumatica Framework Tools. To access the Acumatica Framework instance remotely, use the fully qualified domain name (FQDN) of the server instead of *localhost* in the URL.

2. On the Sign-In page, enter the following default credentials:
   - **My User Name**: *admin*
   - **My Password**: *setup*
3. Click **Sign In**.
4. Type the new password in the **New Password** and **Confirm Password** boxes.
5. If your Acumatica Framework instance is configured so that you need to agree to the terms of the Acumatica User Agreement, do the following:
   a. Click the **Acumatica User Agreement** link, and read the user agreement.

b. Select **Check here to indicate that you have read and agree to the terms of the Acumatica User Agreement**, if you agree to these terms. If you don't agree to the terms of the user agreement, you cannot start using the software.

6. Click **Sign In**.

To Install Acumatica Framework Templates

To install Acumatica Framework Templates, which consist of Microsoft Visual Studio templates, do the following:

1. Run the Acumatica Framework Configuration Wizard. For example, select **Start > Acumatica > Acumatica Framework Configuration**.
2. On the Welcome page of the wizard, click **Deploy Acumatica Framework Tools**.
3. Optional: On the Confirm Configuration page, if you want to save the configuration settings in an XML file (which you can use later for an unattended installation from the command line) on your computer, click **Save Configuration** and save the XML file with the configuration settings.
4. Click **Finish**.
5. In the **VSIX Installer** dialog box, which has opened, select the versions of Microsoft Visual Studio to which you want to install the templates, and click **Install**.
6. After the installation has completed, close the **VSIX Installer** dialog box by clicking **Close**.

Licensing and Activating Acumatica ERP

By default, Acumatica ERP is installed in trial mode. Although in this mode all features are available, the mode has the following restrictions:

- You can create no more than 10 tenants per instance.
- All tenants that you create have the *Test* status.
- Only two conventional users can concurrently use the system. Each time a third conventional user signs in to Acumatica ERP, one of the current users is forcibly signed out.
- Only two API users can concurrently use the system. A third API user cannot sign in to Acumatica ERP and receives an error during the signing in.

For details on test tenants, see *Support of Multiple Tenants* in the Acumatica ERP System Administration Guide.

You remove the trial mode restrictions when you obtain and activate the license for using Acumatica ERP.

A license is applied to an Acumatica ERP instance defining the license tier (that is, the level of resources that you can utilize by using the license) and the set of features you can activate for the instance. You can create additional trial tenants. For details on applying a license, see *Preparing an Instance: Activation and Licensing*.

If you use Acumatica Self-Service Portal, you have to obtain a license for the Self-Service Portal instance, activate the license, and then activate the required Self-Service Portal features. For details, see *Configuring Acumatica Self-Service Portal*.

Related Links

- *Installing Acumatica ERP*
- *Activate License*

License Restrictions for the Number of Acumatica ERP Users

In Acumatica ERP, system administrators can check the limits for system resources specified in their license by using the *License Monitoring Console* (SM604000) form.

One limit shown on this form is the maximum numbers of users allowed to use the system concurrently according to the currently applied license. This topic describes this limit and the way it works in Acumatica ERP.

User Types

Two types of users can sign in to Acumatica ERP instances:

- Conventional users: These users sign in by using their user names and passwords either on the Acumatica ERP Sign-In page, or through the mobile application, or through single sign-on page provided that SSO with Google or Microsoft Account has been set up.
- API users: These users are client applications that sign in by using the method for singing in of the contract-based SOAP API, contract-based REST API, or screen-based SOAP API, or by using OAuth 2.0 mechanism of authorization for applications.

License Restrictions

Trial mode allows only two conventional users and two API user to concurrently use the system. Once a license has been applied to your Acumatica ERP instance, the particular license defines how many user sessions can be active in the instance.

The license restriction for conventional users is shown in the **Concurrent Users** box on the **License** tab of the *License Monitoring Console* (SM604000) form. When an extra conventional user signs in to the system and the number of user sessions exceeds this license restriction, the user with the earliest sign-in time is forcibly signed out.

On the **License** tab of the *License Monitoring Console* form, the **Maximum Number of Web Services API Users** box displays the license restriction for API users. When an extra API user tries to sign in to the system and the number of API user sessions exceeds your license restriction, an error message is returned and the sign-in process is interrupted. For details about the license limitations for the API users, see *License Restrictions for API Users*.

Multiple User Sessions for the Same User

You can define how the Acumatica ERP instance handles conventional users (but not API users) who try to sign in using the same user name—for example, from different browsers. In the site web.config settings, you can use the <concurrentUserMode> parameter to specify whether the system allows users to sign in multiple times under the same user name.

If the <concurrentUserMode> parameter is set to *false* (the default setting), the system allows multiple user sessions under the same user name or names. For example, 10 users can sign in as *admin*, 10 user sessions are created, and all of them are counted to comply with the concurrent user limit.

If the <concurrentUserMode> is *true*, the system allows only one user session under each user name. If anyone tries to sign in the system with a user name that is already signed in, the system will forcibly sign out the first user that is signed in with this user name.

For details on changing the default system behavior to disallow multiple user sessions for the same user, see *To Limit Users to One Session* .

Related Links

- *License Restrictions for API Users*

To Limit Users to One Session

In Acumatica ERP, you can specify whether the instance prevents users from signing in more than once under the same user name. By default, this option is turned off, and system users can create user sessions (under the same user name and with different user names) until the concurrent user limit is reached. For more information, see *License Restrictions for the Number of Acumatica ERP Users*.

When you save changes to the `web.config` file, the website is automatically restarted. Make sure that all users are warned about the restart so that they can save their documents in advance.

To Limit Users to Only One Sign-In Per User

1. Open the `web.config` file for the site instance. Usually it is located in `%Program Files%\Acumatica ERP\<instance name>`, where *<instance name>* is the name of the application instance website.

2. In the file, find the `providers` section in `membership`, which has the following settings (they depend on your website settings).

```
<membership defaultProvider="PXActiveDirectorySyncMembershipProvider">
   <providers>
     <remove name="PXActiveDirectorySyncMembershipProvider"/>
     <remove name="MySQLMembershipProvider" />
     <add name="PXActiveDirectorySyncMembershipProvider"
          type="PX.Data.PXActiveDirectorySyncMembershipProvider, PX.Data"
             mainProviderType="PX.Data.PXDatabaseMembershipProvider" . . . />
     </providers>
 </membership>
```

3. Add the <concurrentUserMode> parameter to the line and specify the *true* value.

```
<membership defaultProvider="PXActiveDirectorySyncMembershipProvider">
   <providers>
     <remove name="PXActiveDirectorySyncMembershipProvider"/>
     <remove name="MySQLMembershipProvider" />
     <add name="PXActiveDirectorySyncMembershipProvider"
          type="PX.Data.PXActiveDirectorySyncMembershipProvider, PX.Data"
          mainProviderType="PX.Data.PXDatabaseMembershipProvider" . . .
          concurrentUserMode="true"/>
     </providers>
 </membership>
```

4. Save the `web.config` file, which causes the website to automatically restart.

Related Links

- *License Restrictions for the Number of Acumatica ERP Users*
- *Preparing an Instance: Activation and Licensing*

Maintaining Acumatica Framework

Maintenance of the Acumatica Framework application instance site and database is similar to maintenance of the Acumatica ERP application instance. Follow the procedures described in *Maintaining Acumatica ERP* to perform maintenance tasks that are associated with application instances of Acumatica Framework and their databases.

Updating Acumatica ERP

Updates for Acumatica ERP provide functional enhancements and new functionality. You need to use an installation package to update your Acumatica ERP instances.

In this topic, you will read about the ways to update Acumatica ERP and the schedule for locking out the system during the time of update.

Updating Acumatica ERP

You can update your instance of Acumatica ERP to a new product version or build in one of the following ways:

- By using the Acumatica ERP web interface
- By using the Acumatica ERP Configuration Wizard

The easiest way of updating Acumatica ERP is by using the web interface.

> ⚠ If you have deployed your instance on Windows Azure, you won't be able to update this instance though the web interface. You must instead use the procedures described in *Updating Your Acumatica ERP Service on Windows Azure*.

If a server with Acumatica ERP is connected to the Internet, the system can download installation packages directly from the Acumatica ERP update server during installation. If the server is not connected to the Internet, you can download the update package from another computer, upload the package to Acumatica ERP, and install it by using the web interface. For more information, see *Updating Acumatica ERP by Using the Web Interface*.

Alternatively, you can update Acumatica ERP by using the Configuration Wizard if you cannot update it by using the web interface (for example, for security reasons). For details, see *Updating Acumatica ERP by Using the Configuration Wizard*.

You can forbid the users of your Acumatica ERP instance to update the system by using the web interface. This might be useful, for example, when you want to avoid an unwanted update of a large database on Amazon Web Services. To prevent users from updating the system through the web interface, you set the `RestrictUpdates` parameter value to *True* in the `appSettings` section of the `web.config` file. With this setting, a message conveying this restriction appears on the *Apply Updates* (SM203510) form, all update actions on this form are blocked, and you can update Acumatica ERP by using the Configuration Wizard only.

> ⚠ The system deletes all custom files from the Acumatica ERP site folders during an update. You can keep custom files in the `Bin` folder by doing one of the following:
>
> - Including all custom files in a customization package and publishing this customization package on the site
> - Adding the file names to the file with the `.preserve` extension in the same folder

Scheduling the Lockout of the System

We recommend that you switch on maintenance mode when you are updating the system. In this mode, users cannot access the system and process documents; therefore, it is safe to apply updates. To switch on maintenance mode, you schedule the system lockout by using the *Apply Updates* form, specifying when the system will be unavailable. When the lockout is in effect, non-administrative users will see a message on the Sign-In page indicating that the site is under maintenance. After finishing the update, you must manually switch off maintenance mode (that is, unlock the system) on the *Apply Updates* form.

> ⚠ When the lockout is in effect the following happens in the system:
>
> - Only users that have the *Administrator* role can sign in to the system
> - The system stops all processes that were run by schedule

For details, see *To Schedule the System Lockout* and *To Unlock an Acumatica ERP Instance*.

Related Links

- *Updating Acumatica ERP by Using the Web Interface*
- *Updating Acumatica ERP by Using the Configuration Wizard*
- *Updating Your Acumatica ERP Service on Windows Azure*
- *Apply Updates*

Updating Acumatica ERP by Using the Web Interface

You can use the Acumatica ERP web interface to remotely update Acumatica ERP (which is installed on the premises of your organization or on Amazon EC2) to a newer version or build.

> ⚠ If you have deployed your instance on Windows Azure, you won't be able to update this instance though the web interface. You must instead use the procedures described in *Updating Your Acumatica ERP Service on Windows Azure*.

In this topic, you will find an upgrade policy, a description of the update process when you use the web interface and recommended update preferences.

Upgrade Policy

On the *Apply Updates* (SM203510) form, only minor updates for your current version of Acumatica ERP are available. You should upgrade your Acumatica ERP from previous versions of the system to Version 2021 R1 manually on the server (upgrade by using the web interface is not supported due to significant changes in customizations). For details, see *Updating Acumatica ERP by Using the Configuration Wizard*.

Before You Proceed

We strongly recommend that before you update Acumatica ERP to a newer product version, you do the following:

- Back up all configuration files and databases used by the application instances.
- If you have created any custom views with the `SCHEMABINDING` clause in the Acumatica ERP database, remove them. (You can create these views anew after update.)
- If you have been replicating the Acumatica ERP database, turn off the replication. (Otherwise, the system cannot be updated.)
- If you developed a client application by using the screen-based SOAP API, follow the procedure described in *To Update a Client Application that Uses Screen-Based Web Services* to prevent a failure of your application that can happen because of the UI changes in the system.
- On the *Automation Schedule Statuses* (SM205030) form, make sure that no processes are scheduled for the update time. If you find any scheduled processes reschedule them so that they start after the update.
- On the *Tenants* (SM203520) form, click **Optimize Database** to check your Acumatica ERP database for orphaned snapshots and delete them if the system finds any orphaned snapshots.

Overview of the Update Process

When you update Acumatica ERP by using the web interface, both the site and the database of the application are updated at the same time. To update Acumatica ERP by using the web interface, you will perform the following steps:

1. If necessary, notify users about the upcoming update and automatically lock out the system at the time of update, as described in *To Schedule the System Lockout*.
2. If you want to upload a custom installation package (which was released especially for your organization) with an update from a local computer, on the *Apply Updates* (SM203510) form, click **Upload Custom Package** and select the custom package file.
3. Update the instance by using the *Apply Updates* form, as described in *To Update Acumatica ERP by Using the Web Interface*.
4. If you are upgrading your system from a version that did not include the search indexes, build the search indexes. For details, see *To Build Search Indexes* in the Acumatica ERP System Administration Guide.
5. If you have locked out the system, unlock the system, as described in *To Unlock an Acumatica ERP Instance*.

Configuration of Update Preferences

If a server with Acumatica ERP is connected to the Internet, the system can download installation packages directly from the Acumatica ERP update server during installation. To make the system download installation packages from the update server and to display the most recent information about Acumatica ERP updates, you need to do the following on the *Update Preferences* (SM203505) form:

- Select the **Use Update Server** check box to download installation packages directly from the Acumatica ERP update server.
- Select the **Check for Updates** check box to automatically check for new updates. When a new product update (a major version or a build) has been approved and released by the Acumatica Quality Assurance team, a notification appears in the **About Acumatica** dialog box. (To open this dialog box, sign in to the system, and on the form toolbar, click **About** on the **Help** menu.)

Related Links

- *Updating Acumatica ERP*
- *Updating Acumatica ERP by Using the Configuration Wizard*
- *Updating Your Acumatica ERP Service on Windows Azure*
- *To Update a Client Application that Uses Screen-Based Web Services*
- *To Schedule the System Lockout*
- *To Update Acumatica ERP by Using the Web Interface*
- *To Build Search Indexes*
- *To Unlock an Acumatica ERP Instance*
- *Apply Updates*
- *Update Preferences*

Updating Acumatica ERP by Using the Configuration Wizard

If you have the installation package file available on your computer, you can update Acumatica ERP locally on the server where the previous version of the system is installed. You can also use this method of updating if for some reason you cannot use the Acumatica ERP web interface to update the application.

You perform the update procedure on the server where the current version of the Acumatica ERP Tools is installed.

> ⚠ To run the installation package, you must have the *Administrator* role on your local computer.

In this topic, you can find a brief description of the update process on a local server and on Microsoft Azure.

Before You Proceed

We strongly recommend that before you update Acumatica ERP to a newer product version, you do the following:

- Back up all configuration files and databases used by the application instances.
- If you have created any custom views with the `SCHEMABINDING` clause in the Acumatica ERP database, remove them. (You can create these views anew after update.)
- If you have been replicating the Acumatica ERP database, turn off the replication. (Otherwise, the system cannot be updated.)
- If you developed a client application by using the screen-based SOAP API, follow the procedure described in *To Update a Client Application that Uses Screen-Based Web Services* to prevent a failure of your application that can happen because of the UI changes in the system.
- On the *Automation Schedule Statuses* (SM205030) form, make sure that no processes are scheduled for the update time. If you find any scheduled processes reschedule them so that they start after the update.
- On the *Tenants* (SM203520) form, click **Optimize Database** to check your Acumatica ERP database for orphaned snapshots and delete them if the system finds any orphaned snapshots.

Overview of the Update Process on a Local Server

To update Acumatica ERP locally, perform the following steps:

1. If necessary, notify users about the upcoming update, and automatically lock out the system for the time of update, as described in *To Schedule the System Lockout*.
2. Use the installation package file available on your computer to update the Acumatica ERP Tools. For details, see *To Update the Acumatica ERP Tools*.
3. Start updating the database and the site of your application instance. The system will automatically perform the following actions:
   a. For instances that contain published customization projects, validate the compatibility of the currently published customization code with the code of the new product version.
   b. Update the database of the instance.
   c. Update the site of the instance.

   For details, see *To Update the Database and Site of an Acumatica ERP Instance*.

   If you need to update the database without updating the site or to update the site without updating the database, see *Divided Update of the Database and the Site*.

   > ⚠ We strongly recommend that you use the common procedure described in this step for a usual update of your Acumatica ERP instance.
4. If you are upgrading your system from a version that did not include the search indexes, build the search indexes. For details, see *To Build Search Indexes* in the Acumatica ERP System Administration Guide.

5. If you locked out the system, unlock the system, as described in *To Unlock an Acumatica ERP Instance*.

Divided Update of the Database and the Site

If (for strong reasons) you need to update the Acumatica ERP database without updating the site, to update the site without updating the database, or to consequently update the database and the site, you can use the **Update only Website** and **Update only Database** commands, which you can find in the drop-down list to the right of the **Upgrade** button in the Application Maintenance page of the Acumatica ERP Configuration Wizard. For details, see *To Update the Database of an Acumatica ERP Instance* and *To Update the Site of an Acumatica ERP Instance*.

> ⚠ When you update your Acumatica ERP instance by using the **Update only Website** or **Update only Database** commands, the system does not validate the customization compatibility. If you have published customization in your Acumatica ERP instance, the instance may stop working after update due to incompatible customization code.

Related Links

- *Updating Acumatica ERP*
- *To Update a Client Application that Uses Screen-Based Web Services*
- *To Schedule the System Lockout*
- *To Update the Acumatica ERP Tools*
- *To Update the Database and Site of an Acumatica ERP Instance*
- *To Update the Database of an Acumatica ERP Instance*
- *To Update the Site of an Acumatica ERP Instance*
- *To Create an Acumatica ERP Service Package*
- *To Deploy the Acumatica ERP Service on Windows Azure*
- *To Build Search Indexes*
- *To Unlock an Acumatica ERP Instance*

Updating Your Acumatica ERP Service on Windows Azure

If you have deployed your Acumatica ERP Service on Windows Azure and want to update this service with a new installation package, you need to do this on the Windows Azure portal. In this topic, you will find an overview of the update process on the Windows Azure portal.

> ⚠ If you change the Windows Azure deployment size (for example, when you extend your subscription from *Small* to *Medium*), you also need to update your Acumatica ERP Service by using the steps described in this topic.

The Update Process on Windows Azure

To update your Acumatica ERP Service that was deployed on Windows Azure, you need to perform the following steps:

1. Download the service package file of the Acumatica ERP version to which you want to update your Acumatica ERP Service, as described in *To Download the Configuration Package*.
2. Download the configuration file of your Acumatica ERP Service, as described in *To Download the Acumatica ERP Service Configuration File*.
3. If necessary, notify users about the upcoming update, and automatically lock out the system for the time of update, as described in *To Schedule the System Lockout*.

4. Update your Acumatica ERP Service on Windows Azure, as described in *To Update Your Acumatica ERP Service on Windows Azure*.
5. If you are updating your system from a version that did not include the search indexes, build the search indexes. For details, see *To Build Search Indexes* in the Acumatica ERP System Administration Guide.
6. If you locked out the system, unlock the system, as described in *To Unlock an Acumatica ERP Instance*.

Related Links

- *To Build Search Indexes*
- *To Download the Configuration Package*
- *To Download the Acumatica ERP Service Configuration File*
- *To Schedule the System Lockout*
- *To Unlock an Acumatica ERP Instance*
- *To Update Your Acumatica ERP Service on Windows Azure*

To Schedule the System Lockout

To notify users about the upcoming update and automatically lock out the system at the time, you can schedule a lockout by using the *Apply Updates* (SM203510) form. A message alerting users to the system lockout will be displayed on the Sign-In page.

When the lockout is in effect the following happens in the system:

- Only users that have the *Administrator* role can sign in to the system
- The system stops all processes that were run by schedule

To Schedule the System Lockout

1. If you are not already signed in to the system, sign in to Acumatica ERP.
2. Open the *Apply Updates* (SM203510) form.
3. On the form toolbar, click **Schedule Lockout**.
4. In the **Schedule Lockout** dialog box, specify the date and time when the system will be locked out and the reason for the lockout.

   

   If you want to update the system immediately, specify the current date and time.
5. If you want to lock out only the current site (but not all sites that use the same database) clear the **Lock Out All Sites** check box.
6. Click **OK** to lock out the system at the specified time.

To Update Acumatica ERP by Using the Web Interface

To update an Acumatica ERP instance by using the web interface, you use the *Apply Updates* (SM203510) form. For more information, see *Updating Acumatica ERP by Using the Web Interface*.

To Update an Acumatica ERP Instance by Using the Web Interface

1. If you are not already signed in to the system, sign in to Acumatica ERP.
2. Open the *Apply Updates* (SM203510) form.
3. Install the new product version. On the **Updates** tab, do the following:
   a. In the **Major Version** box, select the product version to which you want to update your Acumatica ERP instance.
   b. In the table of available updates, select the latest product build of the selected version, and then click **Download Package** in the table toolbar.

      When the download is complete, the **Ready to Install** check box is automatically selected.
   c. If you have published customization projects in your Acumatica ERP instance, in the table toolbar, click **Validate Customization** to start the process of validating the compatibility of the currently published customization code with the code of the selected product version. For details, see *To Validate the Compatibility of the Published Customization with a New Version Before an Upgrade*.
   d. If the validation has succeeded, in the table toolbar, click **Install Update**.

      A background process starts that copies Acumatica ERP software components to the server computer and then updates the application instances and databases.

If you locked the instance before the update, you should unlock the instance, as described in *To Unlock an Acumatica ERP Instance*.

To Update the Acumatica ERP Tools

You perform the update procedure on the server where the current version of the Acumatica ERP Tools is installed. For an overview of the update procedure, see *Updating Acumatica ERP by Using the Configuration Wizard*.

To run the installation package, you must have the *Administrator* role on the local computer.

To Update the Acumatica ERP Tools

1. If necessary, back up the configuration files and databases maintained by the application instances.
2. Run the latest version of the installation package, and follow the procedure for installing Acumatica ERP Tools. For more information, see *To Install the Acumatica ERP Tools*.

To Update the Database and Site of an Acumatica ERP Instance

After you have updated the Acumatica ERP Tools, you need to update the database and the site of your Acumatica ERP instance. For an overview of the update procedure, see *Updating Acumatica ERP by Using the Configuration Wizard*.

To Update the Database and Site of an Acumatica ERP Instance

1. Run the Acumatica ERP Configuration Wizard on the server where the Acumatica ERP Tools are installed.

2. On the Welcome page, click **Perform Application Maintenance**.
3. On the Application Maintenance page, do the following:
   a. In the **Installed Sites** list, click the Acumatica ERP instance whose version you want to update. You can see the current versions in the **Site Version** and **DB Version** boxes.
   b. Click **Upgrade**.
4. When you're prompted, click **Yes** to continue the update.
5. In the **SQL Server Authentication** dialog box, do the following:
   a. Select the authentication method to be used to connect to the database.
   b. If you have selected the **SQL Server Authentication** option, specify an account that has sufficient rights to make changes to the database.
   c. If you want to shrink data after the database maintenance, select the **Shrink data** check box.
   d. Click **OK** to start the update.

For instances that contain published customization projects, the system first validates the compatibility of the currently published customization code with the code of the selected product version. If the validation is successful, the system updates the database and the site. If the validation fails, the **Validation Failed** window opens to display the list of the executed checks and the discovered errors, and the update process is interrupted. To resolve any issues that were discovered, see *To Resolve an Issue Discovered During the Validation*.

The time required for the update depends on the performance of your database server, the differences between the old and current versions of the database schema, the hardware configuration of the server, and the current system load. When the update of the instance is finished, the Acumatica ERP Configuration Wizard updates the list of instances.

To Update the Database of an Acumatica ERP Instance

You update the databases after you update the Acumatica ERP Tools.

You must update the application instances as well.

To Update the Database of an Application Instance

1. Run the Acumatica ERP Configuration Wizard on the server where Acumatica ERP is installed. For example, select **Start > Acumatica > Acumatica ERP Configuration**.
2. On the Welcome page, click **Perform Application Maintenance**.
3. On the Application Maintenance page, do the following:
   a. In the **Installed Sites** list, click the Acumatica ERP instance whose database you want to update. You can see the current version in the **DB Version** box.
   b. In the drop-down menu next to the **Upgrade** button, select **Update only Database**.
4. When you are prompted, click **Yes** to continue the update.
5. In the **SQL Server Authentication** dialog box, specify the authentication method to be used to connect to the database.

   If you select the **SQL Server Authentication** option, specify an account that has sufficient rights to make changes to the databases.
6. If you want to shrink data after the database maintenance, select the **Shrink data** check box.

7. Click **OK**.

The time required for the update depends upon your database server performance and the differences between the old and current versions of the database schema.

After you have updated the database you should update the site, as described in *To Update the Site of an Acumatica ERP Instance*.

To Update the Site of an Acumatica ERP Instance

You update an application instance after you update the Acumatica ERP Tools.

> ⚠ You must update the database of the application instance as well. For details, see *To Update the Database of an Acumatica ERP Instance*.

To Update the Site of an Acumatica ERP Instance

1. Run the Acumatica ERP Configuration Wizard on the server where the Acumatica ERP Tools are installed.
2. On the Welcome page, click **Perform Application Maintenance**.
3. On the Application Maintenance page, do the following:
   a. In the **Installed Sites** list, click the Acumatica ERP instance whose version you want to update. You can see the current version in the **Site Version** box.
   b. In the drop-down menu next to the **Upgrade** button, select **Upgrade only Site**.
4. When you're prompted, click **Yes** to continue the update.

The update process takes a few minutes, depending on the hardware configuration and the current system load. When the update of the instance is finished, the Acumatica ERP Configuration Wizard updates the list of instances.

To Download the Acumatica ERP Service Configuration File

Before you update your Acumatica ERP Service deployed on Windows Azure, you should download the configuration file (`*.cscfg`) that you will use for update, as described in this topic.

To Download the Acumatica ERP Service Configuration File

1. Sign in to the *Windows Azure portal*.
2. On the left pane, click **Cloud Services (classic)**.
3. In the **Cloud Services (classic)** blade, click the name of the Acumatica ERP Service you want to update.
4. In the left part of your Acumatica ERP Service blade, click **Configuration**.
5. On the **Configuration** blade toolbar, click **Download** to download the `*.cscfg` configuration file (see the following screenshot).

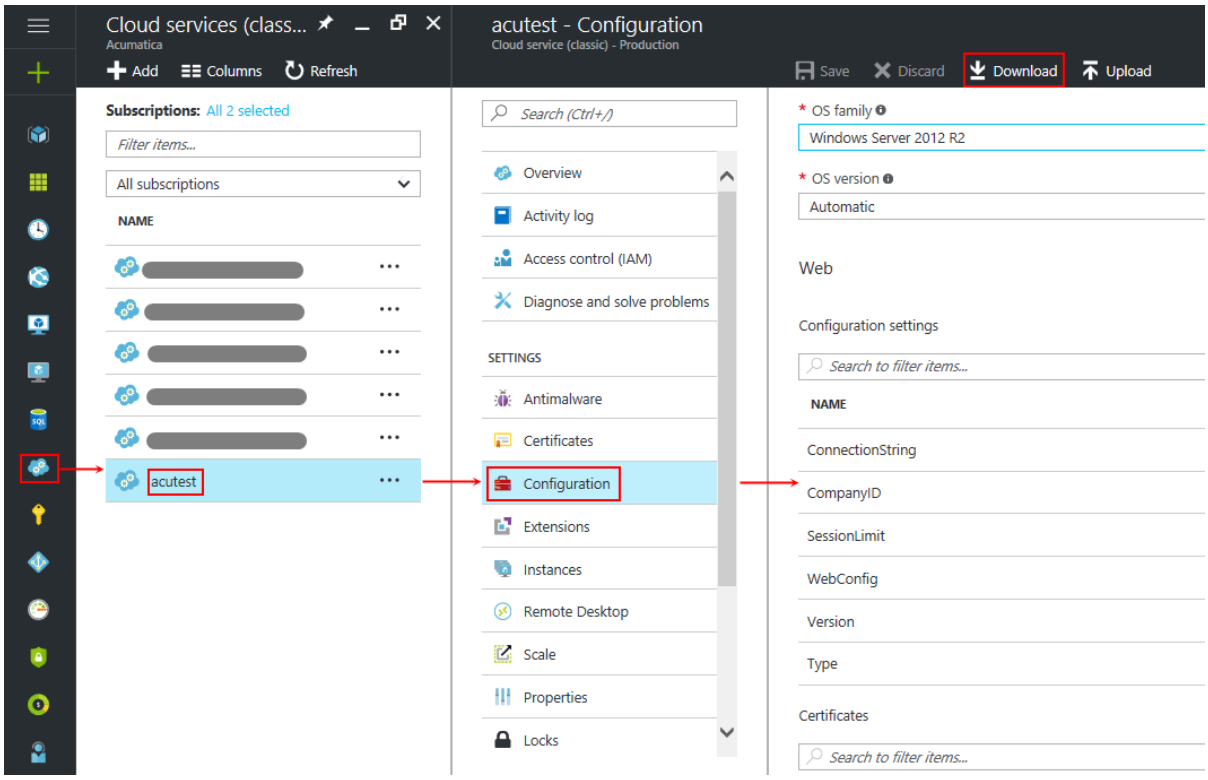

Figure: Windows Azure portal: Downloading a configuration file

To Update Your Acumatica ERP Service on Windows Azure

To update your Acumatica ERP Service deployed on Windows Azure, you need to follow the procedure described in this topic. For the overview of the update procedure, see *Updating Your Acumatica ERP Service on Windows Azure*.

To Update Your Acumatica ERP Service on Windows Azure

1. Sign in to the *Windows Azure portal*.
2. On the left pane, click **Cloud Services (classic)**.
3. In the **Cloud Services (classic)** blade, click the name of the Acumatica ERP Service you want to update.
4. On the toolbar of your Acumatica ERP Service blade, click **Update** (see the following screenshot).

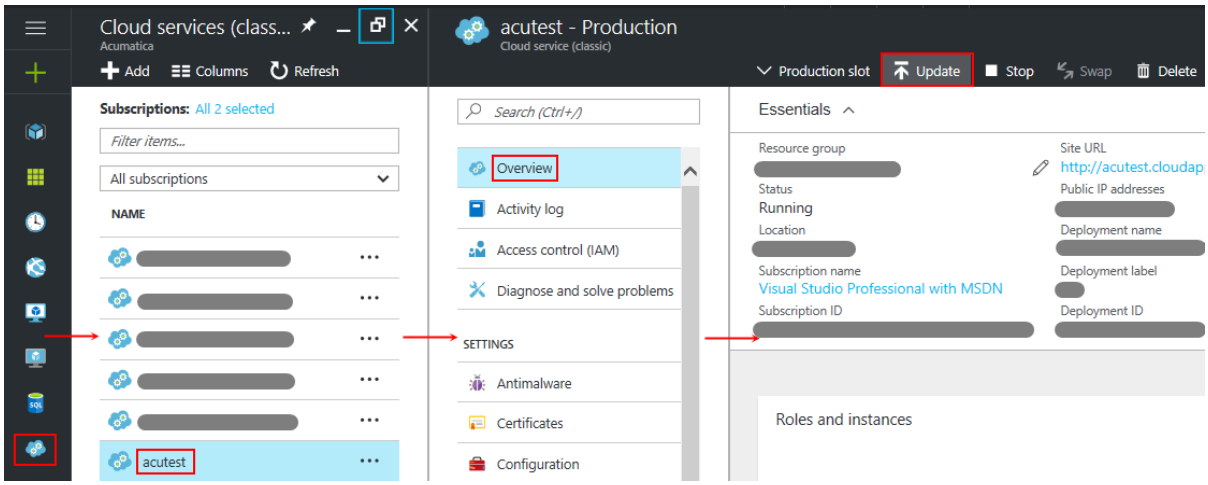

Figure: Windows Azure portal: Opening the Update you deployment blade

5. In the **Update your deployment** blade, do the following (see the screenshot below):
   a. In the **Package** box, select the `*.cspkg` package file that you downloaded from the Partner Portal.
   b. In the **Configuration** box, select the `*.cscfg` configuration file that you downloaded on the **Configuration** blade.
   c. Specify other settings to meet your needs.
   d. Click **OK** to start updating the service.

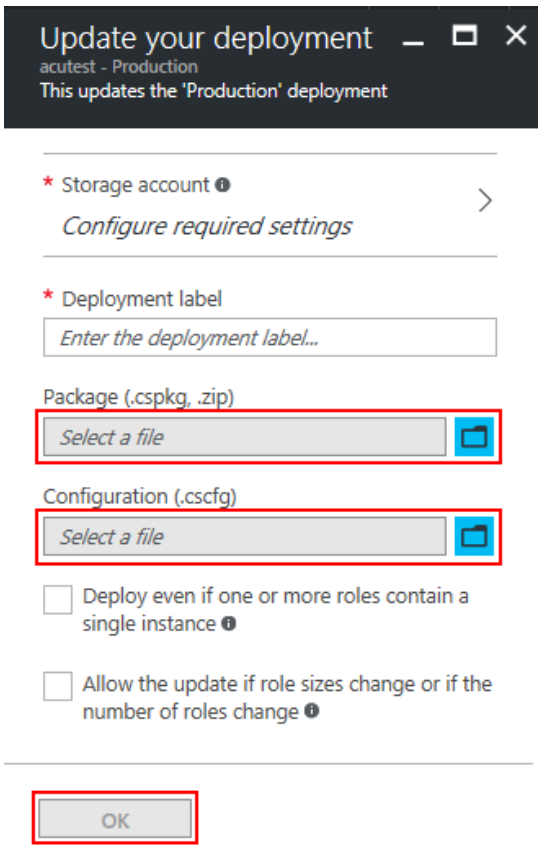

Figure: Windows Azure portal: Updating your Acumatica ERP Service

To Update a Client Application that Uses Screen-Based Web Services

To prevent application failures and omit the regeneration of the WSDL description for each change of the user interface of the system, we recommend that you follow the procedure described in this topic before you update your Acumatica ERP instance.

To Update a Client Application that Uses Screen-Based Web Services

To prevent application failures with the update to a newer version of Acumatica ERP, perform the following steps before you install the update:

1. Create a test copy of your production Acumatica ERP instance.
2. Make changes to your client application, as described in *To Use the Screen-Based API Wrapper*.
3. Test the client application with the test copy of your Acumatica ERP instance.
4. Update the test copy of your Acumatica ERP instance to a new version of Acumatica ERP.
5. Test the client application with the updated test copy of your Acumatica ERP instance.
6. Update the production instance of Acumatica ERP to the new version.

You should distribute the client application along with the XML schema file that is generated by the screen-based API wrapper. For details, see *Screen-Based API Wrapper*.

To Unlock an Acumatica ERP Instance

If you have locked your instance before updating Acumatica ERP, you should use the *Apply Updates* (SM203510) form to unlock the instance after you finish updating it.

When the lockout is in effect the following happens in the system:

- Only users that have the *Administrator* role can sign in to the system
- The system stops all processes that were run by schedule

To Unlock an Acumatica ERP Instance

1. If you are not already signed in to the system, sign in to Acumatica ERP.
2. Open the *Apply Updates* (SM203510) form.
3. On the form toolbar, click **Stop Lockout** to unlock the system.

Uninstalling Acumatica ERP

To uninstall an Acumatica ERP application instance, you perform the following steps:

1. Delete application instances on the server by using the Acumatica ERP Configuration Wizard. For details, see *To Delete an Acumatica ERP Application Instance*.
2. Uninstall the Acumatica ERP Tools on a server computer by using the standard Windows procedure. The relevant registry data is cleaned, and the program group item is removed.

The above procedure does not affect the following entities:

- Databases created by the application: If you need to delete a database, do so manually by using SQL Server tools.
- Directories on the file system used by the application: If needed, manually delete the empty directories on the file system and the program group items.

Related Links

- *Maintaining Acumatica ERP*

To Delete an Acumatica ERP Application Instance

When you delete an instance by using the Application Maintenance page, you delete applications created under the default site in Internet Information Services (IIS) when installing Acumatica ERP.

To Delete an Acumatica ERP Application Instance

1. Run the Acumatica ERP Configuration Wizard on the server where Acumatica ERP is installed. For example, select **Start > Acumatica > Acumatica ERP Configuration**.
2. On the Welcome page, click **Perform Application Maintenance**.
3. On the Application Maintenance page, do the following:
   a. In the **Installed Sites** list, click the Acumatica ERP instance that you want to delete.
   b. Click **Delete**.
   c. When you're prompted, click **OK**.

The Acumatica ERP instance files are deleted from the file system, and the virtual directory of the instance is removed from IIS configuration. The database of the instance remains untouched when you delete the instance. You can manually delete the database by using tools of the database server.

Using the Command-Line Tool

You can use the command-line tool (executable name `ac.exe`) to deploy a new application instance of Acumatica ERP and to perform database and application maintenance. By default, `ac.exe` is located in the folder on the computer that has Acumatica ERP installed, which is `C:\Program Files (x86)\Acumatica ERP\Data\`.

- *The Command-Line Tool*
- *Possible Parameters and Values*
- *To Create a Configuration File*
- *Examples of the Configuration String*

The Command-Line Tool

When you run `ac.exe`, you supply a set of command-line parameters where each parameter must be presented in the following form.

```
-parameter:"parameter value"
```

Use the following syntax.

```
ac.exe [-f|-file:"path to configuration file"] [-cm|-configmode:"main scenario"]
[-s|-dbsrvname:"server name"] [-sw|-dbsrvwinauth:"True|False"]
[-u|-dbsrvuser:"user name"] [-p|-dbsrvpass:"user password"]
[-d|-dbname:"database name"] [-n|-dbnew:"True|False"]
[-b|-dbupdate:"True|False"] [-dm|-dbmode:"Regular|Template|Demo"]
[-dz|-dbsize:"database size in GB"] [-ds|-dbskip:"skip database setup"]
[-dc|-dbshrink:"shrink database"] [-i|-iname:"instance name"]
[-io|-ioldname:"old instance name"] [-h|-ipath:"instance directory"]
[-is|-vmsize:"Small|Medium|Large|ExtraLarge"]
[-it|-trumbprint:"X.509 thumbprint"] [-ip|-project:"VS project name"]
[-w|-swebsite:"Web site name"] [-v|-svirtdir:"virtual directory"]
[-po|-spool:"application pool"] [-a|-sactions:"AnonymousUser|SelectedUser"]
[-k|-suser:"user name"] [-m|-spass:"user password"]
[-dw|-dbwinauth:"True or False"] [-dn|-dbnewuser:"True|False"]
[-du|-dbuser:"user name"] [-dp|-dbpass:"user password"]
[-wc|-wscompany:"company ID"] [-wu|-wsuser:"user account"]
[-ww|-wswiki:"portal Wiki"] [-cs|-securemode:"True|False"]
[-sp|-split:"[t|Table=table name]; [o|Option=Separate|Split|Shared]"]
[-c|-company:"[ci|CompanyID=company ID]; [cp|ParentID=parent company ID]
[cv|Visible=True];[ct|CompanyType=True]; [cn|LoginName:user name];
[cd|Delete:True]"] [-vst|-vstemplates:"True|False"]
[-vsc|-vscontrols:"True|False"] [-op|-output:"Normal|Quiet|Forced"]
```

All parameter values are case-sensitive and must be enclosed in quotation marks. Each parameter for the command line also has a short form that you can use instead of the full parameter name. If you have specified a parameter more than once in a command line, the last parameter value will be used.

You can run `ac.exe` in one of three modes:

- *Command-line*: Parameters are passed to `ac.exe` from the command line.

- *Batch*: The path to the configuration file with parameters is passed to `ac.exe` from the command line.
- *Mixed*: Some parameters are passed to `ac.exe` through the configuration file, while other parameters are passed from the command line. In this mode, command-line parameters have a priority over those specified in the configuration file.

Possible Parameters and Values

The following table lists all available command-line parameters and values and a brief description of each parameter.

Parameter	Values	Description

`-file`
or
`-f`
	path to configuration file	Specifies the directory where the XML configuration file is stored. By default, the file is stored in `C:\Program Files (x86)\Acumatica ERP\Data\`.
		Example: `-file:"C:\Program Files (x86)\Program Folder\Data\"`

`-configmode`
or
`-cm`
	NewInstance
	DBMaint
	DBConection
	CompanyConfig
	ToolsInstall
	NewCompanyPortal
	DeleteSite
	RenameSite
	UpgradeSite
		(Mandatory) Specifies the maintenance scenario for which you are using the command-line tool. The possible values and applicable scenarios follow:
		• *NewInstance*: Installs a new application instance. You can also use the following command-line parameters in this scenario:
		-company
		-dbname
		-dbnew
		-dbnewuser
		-dbpass
		-dbsrvname
		-dbsrvpass
		-dbsrvuser
		-dbsrvwinauth
		-dbupdate
		-dbuser
		-dbwinauth
		-iname
		-ipath
		-sactions
		-spass
		-split
		-spool
		-suser
		-svirtdir
		-swebsite

Parameter	Values	Description
		• *DBMaint*: Creates a new database or updates an existing database with a current version of the database schema. You can also use the following command-line parameters in this scenario: -company -dbname -dbnew -dbsrvname -dbsrvpass -dbsrvuser -dbsrvwinauth -dbupdate -split • *DBConection*: Modifies database connection settings. You can also use the following command-line parameters in this scenario: -company -dbname -dbnew -dbnewuser -dbpass -dbsrvname -dbsrvpass -dbsrvuser -dbsrvwinauth -dbupdate -dbuser -dbwinauth -split • *CompanyConfig*: Adds new tenants or deletes existing ones. You can also use the following command-line parameters in this scenario: -company -dbname -dbnew -dbsrvname -dbsrvpass -dbsrvuser -dbsrvwinauth -dbupdate -split • *ToolsInstall*: Installs Acumatica ERP controls and templates for Microsoft Visual Studio; this option is available in the Acumatica ERP Configuration Wizard. You can also use the following command-line parameters in this scenario:

Parameter	Values	Description
		-vscontrols -vstemplates • *NewCompanyPortal*: Installs a new tenant portal; this option is available in the Acumatica ERP Configuration Wizard. You can also use the following command-line parameters in this scenario: -dbname -dbnew -dbnewuser -dbpass -dbsrvname -dbsrvpass -dbsrvuser -dbsrvwinauth -dbupdate -dbuser -dbwinauth -iname -ipath -sactions -spass -spool -suser -svirtdir -swebsite -wscompany -wsuser -wswiki • *DeleteSite*: Deletes an existing Acumatica ERP instance. You can also use the -iname parameter in this scenario. • *RenameSite*: Renames an existing Acumatica ERP instance. You can also use the following command-line parameters in this scenario: -iname -ioldname • *UpgradeSite*: Upgrades the files of an existing Acumatica ERP instance. You can also use the `-iname` command-line parameter in this scenario. Example: `-configmode:"NewInstance"`

`-dbsrvname`
or
`-s`
	server name	Specifies the name of the SQL server that will be accessed by this application instance of Acumatica ERP. The default setting is *(local)*.
		Example: `-dbsrvname:"(local)"`

Parameter	Values	Description

`-dbsrvwinauth`
or
`-sw`
	True
	False
		Specifies whether Windows or SQL Server authentication will be used by the configuration tools to access SQL Server. Select one of the following values:
		• *True*: Uses Windows authentication. This is the default value.
		• *False*: Uses SQL Server authentication.
		Example: `-dbsrvwinauth:"True"`

`-dbsrvuser`
or
`-u`
	user name	Specifies the user name of the account used to access SQL Server. You must add this parameter if the SQL Server authentication method is used (and the `dbsrvwinauth` parameter value is set to *False*).
		Example: `-dbsrvuser:"SQLAdmin"`

`-dbsrvpass`
or
`-p`
	user password	Specifies the user password for the account used to access SQL Server. You must specify this parameter if the SQL Server authentication method is used (and the `dbsrvwinauth` parameter value is set to *False*).
		Example: `-dbsrvpass:"<user_password>"`

`-dbname`
or
`-d`
	database name	Required. Specifies the name of the database maintained by this application instance of Acumatica ERP.
		Example: `-dbname:"HSBC_DB"`

`-dbnew`
or
`-n`
	True
	False
		Specifies whether you want to create a new database in SQL Server. The default setting is *True*.
		Example: `-dbnew:"False"`

`-dbupdate`
or
`-b`
	True
	False
		Specifies whether you want to update an earlier version of the database with a newer one. You can also use this parameter to repair an existing database of the current version. The default setting is *True*.
		Example: `-dbupdate:"False"`

`-dbmode`
or
`-dm`
	Regular
	Template
	Demo
		Specifies the database creation mode. This parameter is valid for Acumatica Framework only. Select one of the following possible values:
		• *Regular*: Creates a regular Acumatica Framework application.
		• *Template*: Creates a template for an Acumatica Framework training application.
		• *Demo*: Creates an Acumatica Framework training application.
		Example: `-dbmode:"Demo"`

Parameter	Values	Description

`-dbsize`
or
`-dz`
	1
	5
	10
	20
	30
	40
	50
		Specifies the maximum size of the database on Azure SQL and therefore is used only for Acumatica ERP deployed on Windows Azure. The available values correspond to the standard database size values in GB. The default setting is *1*.
		Example: `-dbsize:"50"`

`-dbskip`
or
`-ds`
	True
	False
		Specifies whether the database setup steps are skipped. If they are, the database will be set up by the Acumatica ERP instance in run time. The default setting is *False*.
		Example: `-dbskip:"False"`

`-dbshrink`
or
`-dc`
	True
	False
		Specifies whether you want the utility to shrink the database once it has been configured. This parameter is used only for Acumatica ERP deployed on Windows Azure. The default setting is *False*.
		Example: `-dbshrink:"True"`

`-iname`
or
`-i`
	instance name	Required. Specifies the name of the Acumatica ERP instance.
		Example: `-iname:"HSBC Main ERP"`

`-ioldname`
or
`-io`
	old instance name	Specifies the current name of an Acumatica ERP instance when you rename this instance.
		Example: `-ioldname:"HSBC_HQ"`

`-ipath`
or
`-h`
	instance directory	Required. Specifies the directory where the application instance files will be stored. The default setting is `C:\Program Files\Acumatica ERP\`.
		Example: `-ipath:"C:\Program Folder\"`

`-vmsize`
or
`-is`
	Small
	Medium
	Large
	ExtraLarge
		Specifies the relative size of the Windows Azure virtual machine. This parameter is used only for Acumatica ERP deployed on Windows Azure. The default setting is *Small*.
		Example: `-vmsize:"ExtraLarge"`

`-thumbprint`
or
`-it`
	X.509 thumbprint	Specifies the thumbprint of the maintenance certificate uploaded to the hosted service on Windows Azure. For more information on finding the thumbprint, see *Deploying the Acumatica ERP Service on Windows Azure*.

Parameter	Values	Description

`-project`
or
`-ip`
	Visual Studio project name	Specifies the name of the Visual Studio project. This parameter is used in Acumatica Framework only.
		Example: `-project:"<project_name>"`

`-swebsite`
or
`-w`
	website name	Specifies the name of the existing Internet Information Services (IIS) website on the local computer.

`-svirtdir`
or
`-v`
	virtual directory	Specifies the name of the IIS virtual directory. If there is no such virtual directory in IIS, this directory will be created on the local IIS.
		Example: `-svirtdir:"<virtual_directory_name>"`

`-spool`
or
`-po`
	application pool	Specifies the name of the IIS application pool. If there is no such application pool in IIS, this pool will be created on the local IIS.
		Example: `-spool:"<application_pool_name>"`

`-dbwinauth`
or
`-dw`
	True
	False
		Specifies whether Windows or SQL Server authentication will be used by this Acumatica ERP instance to access SQL Server. These are the possible values:
		• *True*: Uses Windows authentication. (This is the default value.)
		• *False*: Uses SQL Server authentication.
		Example: `-dbwinauth:"True"`

`-dbnewuser`
or
`-dn`
	True
	False
		Specifies whether a new SQL Server account must be created. The default setting is *True*.
		Example: `-dbnewuser:"True"`

`-dbuser`
or
`-du`
	user name	Specifies the name of the user account used by this Acumatica ERP instance to access SQL Server. You must add this parameter if the SQL Server authentication method is used (and the dbwinauth parameter value is set to *False*).
		Example: `-dbuser:"SQLAdmin"`

`-dbpass`
or
`-dp`
	user password	Specifies the password of the user account used by this Acumatica ERP instance to access SQL Server. You must add this parameter if the SQL Server authentication method is used (and the dbwinauth parameter value is set to *False*).
		Example: `-dbpass:"SQLAdmin"`

`-wscompany`
or
`-wc`
	company ID	Specifies the ID of the tenant that will be used for the tenant portal. This parameter is used only in the *Company Portal* configuration mode.
		Example: `-wscompany:"<company_ID>"`

Parameter	Values	Description

`-wsuser`
or
`-wu`
	user name	Specifies the user account that will be used for the tenant portal. This parameter is used only in the *Company Portal* configuration mode.
		Example: `-wsuser:"<company_ID>"`

`-wswiki`
or
`-ww`
	portal Wiki	Specifies the Wiki article that will be used for the tenant portal. This parameter is used only in the *Company Portal* configuration mode.
		Example: `-wswiki:"<company_ID>"`

`-securemode`
or
`-cs`
	True
	False
		Specifies whether the tenant ID is displayed on the logon screen. The default setting is *False*. Select one of these possible values:
		• *True*: Hides the tenant ID.
		• *False*: Displays the tenant ID.
		Example: `-securemode:"False"`

`-split` or	*table split options*	Specifies split options for a table stored in an existing database. If you want to configure more than one table, you need to specify this parameter for each of the tables. This parameter contains two subparameters: *Table* (short form: *t*) and *Option* (short form: *o*). For the `Table` subparameter, you specify the name of the database table. For the `Option` subparameter, you specify one of the three values that indicate the available split modes: • *Separate* • *Split* • *Shared* Example: `-Split:"Table=AccountClass; Option=Shared; " -Split:"Table=AccessInfo; Option=Split; "-Split:"Table=APContact; Option=Separate;"`

Parameter	Values	Description

`-company`
or
`-c`
	company options	Specifies tenant options. If you want to configure options for more one tenant, specify this parameter for each of the tenants. This parameter contains the following subparameters:
		• CompanyID: Specifies the tenant ID. To modify the settings of an existing tenant, specify its ID here.
		• ParentID: Specifies the ID of the tenant's parent tenant.
		• Visible: Allows users to sign in to the tenant if you specify the True value.
		• CompanyType: Inserts demo data into the tenant's database if you specify the True value.
		• LoginName: Displays the tenant name on the Acumatica ERP logon screen.
		• Delete: Deletes the tenant if you specify the True value.
		Example: `-company:"CompanyID=KC; ParentID=1; Visible=True; CompanyType=True; LoginName=Company; Delete=True"`

`-vstemplates`
or
`-vst`
	True
	False
		Specifies whether Acumatica Framework Templates for Microsoft Visual Studio must be installed. This parameter is used with Acumatica Framework only. To install the templates, add this parameter and specify the *True* value.
		Example: `-vstemplates:"True"`

`-vscontrols`
or
`-vsc`
	True
	False
		Specifies whether Acumatica Framework Controls for Microsoft Visual Studio must be installed. This parameter is used with Acumatica Framework only. To install the controls, add this parameter and specify the *True* value.
		Example: `-vscontrols:"True"`

`-output`
or
`-op`
	Normal
	Quiet
	Forced
		Specifies the command-line execution mode. Select one of the following possible values:
		• *Normal*: The command line acts as a dialog. When you run the `ac.exe` utility, you will answer questions related to the parameters.
		• *Quiet*: All warnings are ignored. Any error forces the `ac.exe` utility to stop and exit.
		• *Forced*: All warnings are ignored. If you do not specify any mandatory parameters, they are automatically configured with default values. Minor errors are ignored, while critical errors force the `ac.exe` utility to stop and exit.
		Example: `-output:"Forced"`

`-dbcollation`
or
`-dl`
	Microsoft SQL Server collation name	Specifies a collation that will be used for a database that is created during Acumatica ERP instance deployment instead of the default *SQL_Latin1_General_CP1_CI_AS* collation.
		Example: `-dbcollation:French_CI_AI`

Parameter	Values	Description

`-dboptimize`
or
`-do`
	True
	False
		Specifies whether the `Optimize Tables` command should be applied to MySQL database tables during deployment of an Acumatica ERP instance. The default value of this parameter is *False* because the process of table optimization may take a lot of time. To apply the `Optimize Tables` command, add this parameter and specify the *True* value.
		Example: `-dboptimize:"True"`

For all command-line parameters that have the *False* and *True* values, you can also use *No* instead of *False* and *Yes* instead of *True*.

To Create a Configuration File

You can create a configuration file for the unattended deployment and maintenance of application instances. You can create this configuration file manually or create it automatically by running the Acumatica ERP Configuration Wizard.

To Create the Configuration File by Using the Acumatica ERP Configuration Wizard

1. Run the Acumatica ERP Configuration Wizard. For example, select **Start > Acumatica > Acumatica ERP Configuration**.
2. Use the wizard to specify all the options that you want.
3. On the final page of the wizard, click **Save Configuration** to save the configuration file.

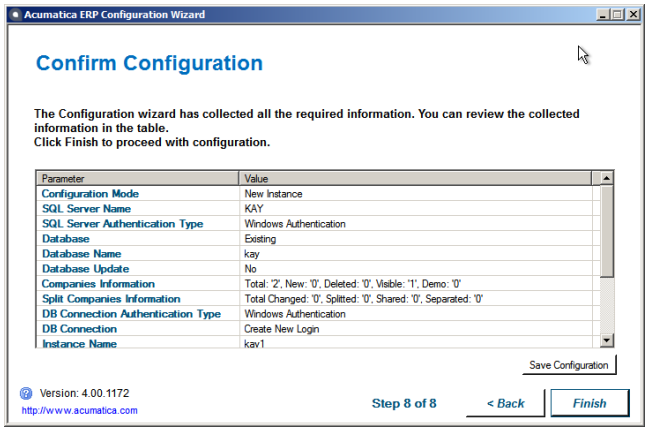

Figure: Saving configuration parameters to a file

The configuration data is saved in this file in XML format and as a command-line command using both the short and full forms of the parameters.

Examples of the Configuration String

In this topic, you can find examples of the configuration string.

The following command-line command creates an application instance.

```
ac.exe -configmode:"NewInstance" -dbsrvname:"GP" -dbname:"JPMorgan"
-company:"CompanyID=1;CompanyType=;LoginName=;"
-company:"CompanyID=2;CompanyType=;ParentID=1;Visible=Yes; LoginName=JPMorgan;"
-iname:"JP Morgan" -ipath:"C:\Program Files\Program Folder\JP Morgan\\"
-swebsite:"Default Web Site" -svirtdir:"JPMorgan" -spool:"JPMorgan"
-sactions:"SelectedUser" -suser:"GP\Administrator"
```

The following command also creates an application instance and uses the short forms of the command-line parameters.

```
ac.exe -cm:"NewInstance" -s:"SM" -d:"InstanceDB" -c:"ci=1;"
-c:"ci=2;cp=1;ct=Demo;cv=True;cn=Company;" -i:"Instance"
-h:"C:\Program Files (x86)\Program Folder\Instance" -w:"Default Web Site"
-v:"Instance" -po:"Classic .NET AppPool" -a:"AnonymousUser"
```

The following command-line command updates an existing database.

```
ac.exe -configmode:"DBMaint" -dbsrvname:"SM" -dbnew:"False" -dbname:"DotNet4"
-dbupdate:"True"
```

The following command updates an existing application instance.

```
ac.exe -cm:"UpgradeSite" -i:"Instance"
```