







ADMINS UNIFIED COMMUNITY (AUC) SYSTEM ADMINISTRATION KIT

Revised: September 13, 2024



ADMINS, Inc. 219 Lewis Wharf Boston, MA 02110 617.494.5100 www.admins.com



1	CUSTON	IER RESPONSIBILITIES	4
	L.1 DISA	STER RECOVERY IS THE RESPONSIBILITY OF THE CUSTOMER	4
	L.2 BACI	CUP PROCEDURES	4
	1.2.1	Scheduled Backups	4
	L.3 DED	CATED APPLICATION SERVER	4
	1.3.1	Physical (Premise) and Virtual Servers	
	L.4 INTE	RNET CONNECTION	
		UAL PRIVATE NETWORKS (VPNS), MULTI-FACTOR AUTHENTICATION, AND AUC	
		'ER AND OPERATING SYSTEM	
•	1.6.1	Towns and Small Organizations Server Hardware (maximum of 25 users)	
	1.6.2	Towns and Small Organizations Server Natural (maximum of 25 users)	
	1.6.3	Large Towns & Cities Server Hardware (more than 25 users)	
	1.6.4	Large Towns & Cities Server Software (more than 25 users)	
	1.6.5	Disk Utilization	
	1.6.6	User Access to Training Resources	
	1.6.7	· · · · · · · · · · · · · · · · · · ·	
		Attachments – Storage Requirements	
	1.6.8 1.6.8.1	Printers - Supported Devices	
	1.6.9	Printers – Non-Supported Devices	
	1.6.9.1	MS XPS Document Writers/Microsoft Print To PDF Not Supported	
		ICATION SERVER CONFIGURATION	
	1.7.1	Server Role Must Be An "Application Server"	
	1.7.2	Screen Saver	
	1.7.2	ADMBLAT Email Configuration Requirements	
	1.7.3	Whitelist the Server IP Address and auc.do.not.reply@gmail.com	
	1.7.3.2	Alternatives to GMAIL	
	1.7.4	Local Drive Access	
	1.7.5	Registry Keys	
	1.7.6	Remote Desktop Services Connections	
	1.7.6.1	Use Group Policy	
	1.7.6	· · · · · · · · · · · · · · · · · · ·	
	1.7.6		
	1.7.6		
	1.7.6.2	Use Active Directory to Limit Session Timeouts	
		User Accounts - For Admins Support Staff	
	1.7.8 1.7.9	Scheduled Tasks Minimum Priority	
	1.7.10	Attachments – Server/Folder Location(s) Purchasing Module	
	1.7.10.1 1.7.10.2	~	
	1.7.10.3	•	
	1.7.10.4	Payroll	17
	1.7.10.5		
	1.7.11	Regular Maintenance	
	1.7.12	Third-Party Software Purchased & Installed by the Customer	17
	1.7.12.1		
	1.7.12.2		
	1.7.12.3 1.7.12.4		
	1.7.12.5		_
	1.7.12.6	·	



	1.7.12.7	7 WinSCP (optional)	18
	1.7.12.8	· · · · · · · · · · · · · · · · · · ·	
	1.7.13	Client Workstation Configuration	18
	1.7.13.1		
	1.7.13.2	,	
	1.7.13.3		
	1.7.13.4		
	1.7.13.5		
2	1.7.13.6	Restricted Desktop Setup	
_		ALLATION OF AUC SOFTWARE	
	2.1.1	File Associations	
		D PARTY SOFTWARE INSTALLED BY ADMINS, INC.	
	2.2.1	ActivePerl 5.24.2	
	2.2.2	Azalea Software Bar Code Fonts and Dynamic Link Libraries	20
	2.2.3	Crystal Reports Runtime Components	20
	2.2.4	PFE32	21
	2.2.5	TrueType MICR Fonts	21
	2.2.6	TrueType OCR A Fonts	21
		HIVE FOR SUPPORT SERVICES	
		RICTED DESKTOP SETUP	
3	BLANK (CHECK STOCK SPECIFICATIONS	22
	3.1 SUP	PLEMENTS	າວ
4	RESTRIC	T DESKTOP	23
	4.1 INST.	all Remote Desktop Services	23
	4.1.1	Select Installation Type	24
	4.1.1.1	Select Destination Server Screen	24
	4.1.1.2	Select Server Roles	
	4.1.1.3	Select Role Services	
	4.1.1.4	Confirm Installation Selections	
	4.1.2	Publish App from Server Manager	
	4.1.2.1 4.1.2.2	Quick Session Collection screen Select RemoteApp programs	
	4.1.2.3	Confirmation	
	4.1.3	Connecting to the remote server	
	4.1.4	Share the restrictdesktop.bat file	
	7.1.7	JIIUI C 111C 1 CJ11 1C14CJN1UD.DUL IIIC	



Welcome

The municipal financial management system is a mission-critical application, so choosing the appropriate equipment is important. These requirements are subject to change. Please contact **ADMINS, Inc.** to confirm specific configuration needs.

The purpose of this System Administration Kit is to provide minimum requirement specifications for hardware, software, third party applications, and configuration tips. This document is a guideline for purchasing, configuring, and maintaining the **AUC** application suite.

Unless specifically noted, this document assumes that all installation, configuration, and ongoing maintenance tasks are the responsibility of the City/Town/Organization.

The **AUC** application suite utilizes the **ADMINS Toolkit v9.2** for its database engine and forms processor. The **ADMINS Rapid Application Development Toolkit** is an integrated suite of resource-efficient executable images, each designed to handle a specific class of business processes.

To review specific requirements regarding the environment please contact ADMINS, Inc.

1 Customer Responsibilities

ADMINS partners with our clients to ensure that the AUC software operates optimally. The following are to be completed by the customer.

1.1 Disaster Recovery is the Responsibility of the Customer

ADMINS, Inc. *does not* provide complete Disaster Recovery services as part of the **AUC** purchase and ongoing maintenance. As such, disaster recovery is not included in the System Administration Kit.

It is up to the discretion and responsibility of the customer to configure, implement and maintain a Disaster Recovery operation.

1.2 Backup Procedures

The Customer is responsible for implementing and managing all formal backup procedures, including on-site and off-site storage of backup media.

1.2.1 Scheduled Backups

Each site should perform **nightly backups** and include **off-site storage** maintenance. **ADMINS, Inc.,** and the **AUC** application neither perform nor provide any regularly scheduled backup services.

1.3 Dedicated Application Server

ADMINS strongly recommends that the application server be dedicated exclusively to this implementation.



1.3.1 Physical (Premise) and Virtual Servers

AUC will run on physical or virtual servers; **AUC** is disk-resident, so we emphasize that the disk access speed be optimized. When configuring a virtual server, **ADMINS AUC** works best with the two processor/two cores each.

1.4 Internet Connection

The application server **MUST** have a high-speed reliable internet connection available to be used by the **ADMINS, Inc.** support staff to provide remote support, training, and installation services.

ADMINS requires a minimum of a dedicated T1 available 24×7 . If the customer's policy is to provide access only during limited hours, the customer shall provide access on request for quarterly software updates to be performed on the weekend. Other situations may require access outside of normal business hours.

To be configured by Customer; must be tested with **ADMINS**, Inc., prior to installation of software.

1.5 Virtual Private Networks (VPNs), Multi-Factor Authentication, and AUC

ADMINS routinely uses and encourages MFA (multi-factor authentication) provisioned by the customer. Coordinate with the **ADMINS** installer to set up the MFA in use at your location. The **AUC** server may be accessed via several VPNs; **AUC** is currently accessed with VPNs in the list below:

- Citrix
- Classlink
- ConnectWise
- Dell[®] SonicWall
- FortiClient

- GlobalProtect
- Juniper Networks
- OpenVPN
- SonicWall NetExtender & Virtual Office

The list is a sample of the VPNs by which **AUC** currently is accessed; there may be others and **ADMINS** makes no recommendation that a particular VPN be deployed.

ADMINS staff currently use several different MFA products, as requested by our clients. These include but are not limited to: Okta Verify, Google Authenticator, Microsoft Authentication via text, and DUO via push.

1.6 Server and Operating System

Below are recommendations based on the size (number of users/devices/modules) for installations.



1.6.1 Towns and Small Organizations Server Hardware (maximum of 25 users)

Minimum Configuration	When buying new ADMINS recommends
 Intel Xeon processor (2 GHz or higher) 64 GB of RAM Minimum of 1TB for the AUC application (plus storage required for rapid retrieval of PDF® images of checks, POs, reports) Uninterrupted Power Supply 	 Intel Xeon (3 GHz or higher) 126-256 GB of RAM1 1TB hard drive for the AUC application (plus storage required for rapid retrieval of PDF® images of checks, POs, reports) Uninterrupted Power Supply

1.6.2 Towns and Small Organizations Server Software (maximum of 25 users)

Minimum Configuration	When buying new ADMINS recommends
 Anti-virus Software Windows 2016 Server² Standard Edition R2 (64-bit) Remote Desktop Services³ 	 Anti-virus Software Windows Server Essentials 2019 for sites with up to 25 users and 50 devices, or Windows Server 2022 Standard Edition Remote Desktop Services³

1.6.3 Large Towns & Cities Server Hardware (more than 25 users)

Minimum Configuration	When buying new ADMINS recommends
 Intel Xeon processor (3 GHz or higher) 64 GB of RAM Minimum of 1TB for the AUC application (storage required for rapid retrieval of PDF® images of checks, POs, reports) Uninterrupted Power Supply 	 Intel Xeon (3 GHz or higher) 126-256 GB of RAM⁴ 1TB hard drive (depending on the size of the municipality, another 1TB or more could be needed.) Uninterrupted Power Supply

¹ When installing Windows 2019, 256GB of RAM is recommended.

² Server with Desktop Experience: This is the complete installation and includes a full GUI.

³ Remote Desktop Services CALs and Windows CALs must be purchased separately when Remote Desktop is used to connect to the server.

⁴ When installing Windows 2019, 256GB of RAM is recommended.



1.6.4 Large Towns & Cities Server Software (more than 25 users)

Minimum Configuration	When buying new ADMINS recommends
 Windows 2016 Server⁵ Standard Edition R2 (64-bit) Anti-virus Software 	 Windows Server 2022 Standard Windows Server 2019 Standard for sites with more than 25 users and 50 devices
- Remote Desktop Services ³	 Anti-virus Software Remote Desktop Services³

1.6.5 Disk Utilization

We strongly recommend that the **AUC** Application *not be installed* on the Operating System disk and that the operating system disk be appropriately sized to hold the Operating System and software listed here. Build in room to hold several years of OS patches.

Note: If the **AUC** application must be installed on the operating system disk then the minimum disk space requirement is 1TB, depending on the size of the customer site.

The **AUC** application requires sufficient power and storage capacity to maintain, in perpetuity, a Live and Training environment.

1.6.6 User Access to Training Resources

AUC offers product demonstrations available on the <u>Videos | ADMINS, Inc.</u> website. Users should have internet access to avail themselves of these resources.

1.6.7 Attachments – Storage Requirements

There are many opportunities in the **AUC** system to attach and retrieve documents as **PDF**® versions of forms. Disk space required will vary with volume; *per page* averages are listed below to help plan for storage needs:

- Purchase orders ~66kb
- Vendor Checks ~75kb
- 1099s ~ 127kb
- Direct Deposit advice ~39kb
- Payroll Checks ~85kb

- Tax Bills 300kb
- Tax Bill Reprints ~ 250kb
- Abatement/Exemption Certificates ~50kb
- Municipal Lien Certificates ~77k

The folder is called AUC_DOC_MGMT and is installed by **ADMINS** during the implementation phase. Access to this folder is available to users via a button on an AUC screen.

⁵ Server with Desktop Experience: This is the complete installation and includes a full GUI.



1.6.8 Printers - Supported Devices

The **AUC** application suite supports a wide variety of printer models:

- Laser - Inkjet

Deskjet - Multi-function printer devices

The default is to print to PDF® to allow attached and re-directed printers to be used. Add the printers to the server or at least the corresponding printer drivers, to make printing faster for users printing reports to attached and redirected printers. The customer installs the printer and drivers.

Existing Printer Minimum Configuration	When buying new
- 64Mb of RAM	- Laser Jet (high speed, high duty cycle printer)
- Networked	- Minimum of 128Mb of RAM
- MICR Toner ⁶	- PCL 5 compliant
- Duplex printing capability ⁷ (optional)	- Network ready
	- MICR Toner ⁶
	- Duplex printing capability ⁷ (optional)



ADMINS recommends that printers be installed and made available on the **AUC** application server instead of printers accessed via a print server. This allows for faster printing directly from the application.

1.6.8.1 For Specialized Printing [Checks/Bill Forms]

Any printer used for printing specialized forms such as AP Vendor Checks and HR Payroll Checks must be capable of printing TrueType MICR Fonts and equipped with a MICR toner cartridge. These forms will be tested with the site's banking institution during the implementation phase of the project (to test readability of the MICR encoding.)

Any printer that is to be used for printing specialized forms such as Tax Bills with a scanline must be capable of printing <u>TrueType OCR A Fonts</u>. These specialized forms will be tested with the site's banking institution during the implementation phase of the project (to test readability of the scanline.)

Once a form is printed and accepted by the bank using a designated printer, that printer may not be swapped out for a different model without incurring additional charges. Each time a form or printer changes, the checks (for MICR scan acceptance) and bills (for optical scanning capabilities) must be re-tested and re-approved by the bank. Please contact **ADMINS**, **Inc**. for more information and quotes to change printers later.

⁶ Required if producing Payables and/or Payroll checks using blank (non-pre numbered) stock. MICR toner cartridges must be available for the printer(s) used for printing checks.

⁷ Duplex printing capability is recommended for printing 1095C, 1099* forms, W2 forms, Tax Bills with backers, POs with Terms and Conditions, and reports



1.6.9 Printers – Non-Supported Devices

The following devices/services are *not supported* with the AUC application suite.

1.6.9.1 MS XPS Document Writers/Microsoft Print To PDF Not Supported

Microsoft Windows operating systems come with pre-installed Document Writer software to create PDF files. These explicitly are not supported and should not be installed on the server, nor should these be allowed to be brought in via RDP.

If the MS XPS Document Writer has been installed, uninstall, or disable it to prevent users from selecting it.

1.7 Application Server Configuration

The following are the responsibility of the Customer. These tasks are required to be completed before any application software may be installed, before any data conversion may begin, and before any training services may be rendered.

1.7.1 Server Role Must Be An "Application Server"

The server upon which the **AUC** application is installed must be an application server – not a domain controller, because domain controller servers cannot run remote desktop services in application mode. An Application Server provides a complete solution for hosting and managing high-performance distributed applications.

Please refer to Section 1.5 above for specific information regarding Server Hardware Requirements.

1.7.2 Screen Saver

Disable the (application server) screen saver on the console.

Disable the (application server) screen saver for end users using either Group Policy or adjusting the settings of each user on the application server.

1.7.3 ADMBLAT Email Configuration Requirements

The **AUC** application uses a utility called **ADMBLAT** to send email messages from the application server, which is installed as an **ADMINS** component. Among some of the uses are:

- PO Approval notifications

Tax Bill Reprints and Reports to Taxpayers

Report Job Streams

HR Direct Deposit Advices

- POs to Vendors, Etc.

- ACH Advice to Vendors

ADMBLAT routes email traffic through a secure GMAIL account using **SSL** for direct service. **ADMBLAT** is SSL compliant and will be installed as the default email utility for the AUC server as of the March 2024 Software update. While **ADMBLAT** is installed as a component of **ADMINS**, customers are required to do the following:



1.7.3.1 Whitelist the Server IP Address and auc.do.not.reply@gmail.com

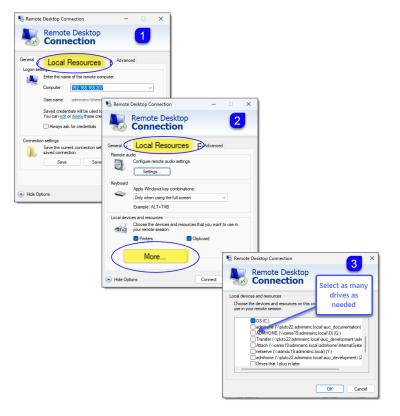
Add the IP Address of the **AUC** server to the customer's SMTP server whitelist, to allow for relaying. Please whitelist the account: auc.do.not.reply@gmail.com.

1.7.3.2 Alternatives to GMAIL

With this new version of ADMBLAT, if desired, use your own Email Server instead of the default ADMINS GMAIL account. Or connect to Exchange (Office 365), another Gmail account, or the local email Server of your City/Town to send email. Send email to support@admins.com for assistance and testing.

1.7.4 Local Drive Access

To configure local drive access in a Remote Desktop Services environment, follow the illustration shown below.



Edit the Properties of the Remote Desktop Shortcut

Click on the Local Resources tab

Click on the **More** button to allow local drives.

If the Printers box is checked, make sure that the MS Image Writer is disabled



1.7.5 Registry Keys

```
HKEY_LOCAL_MACHINE\
Software\
Wow6432Node\
SAP BusinessObjects\
Suite XI 4.0\
Crystal Reports\
Export\
PDF
```

The AUC application suite includes the option to create system generated PDF® files and attach them to their "parent" record. A registry entry is required on the application server to ensure that the appearance and print behavior of the PDF® files works as intended.

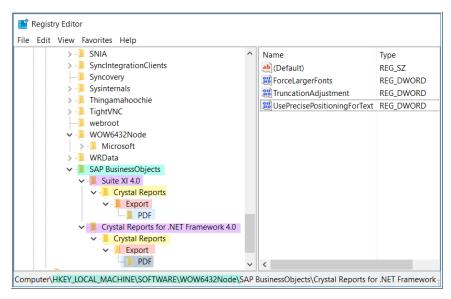
For example, purchase order copies are created and attached to the PO and Vendor files.

```
HKEY_LOCAL_MACHINE\
Software\
Wow6432Node\|
SAP BusinessObjects\
Crystal Reports for .NET Framework 4.0\
Crystal Reports\
Export\
PDF
```

To preserve the integrity of the fonts used in the printed documents as well as the system generated PDF® copies, create registry keys on the AUC application server under both locations:

Registry Key	Value
ForceLargerFonts	1
TruncationAdjustment	6
UsePrecisePositioningForText	1

If the SAP Business Objects key does not exist in the registry, create it and the subkeys. Make the entries in both locations.



These three REG_DWORD entries should be in effect for all users based on the values set in the HKEY_LOCAL_MACHINE entries.

If users report a reduced font size when creating the **PDF**® file, please add these registry entries to **each of their** user accounts on the server.



HKEY_CURRENT_USER\
Software\
SAP BusinessObjects\
Suite XI 4.0\
Crystal Reports\
Export\
PDF

HKEY_CURRENT_USER\
Software\
SAP BusinessObjects\
Crystal Reports for .NET Framework 4.0\
Crystal Reports\
Export\

Registry Key	Value	
ForceLargerFonts	1	This link provides a complete list of Registry Keys used by
TruncationAdjustment	6	Crystal Reports. 2165260 - List of Registry Keys used in
UsePrecisePositioningForText	1	Crystal Reports (sap.com)

1.7.6 Remote Desktop Services Connections

Remote Desktop Services connections should be limited to:

- One connection per username. Do not allow users to connect to the application more than once. If the user has two Active Directory usernames, the user can connect with each of them simultaneously.
- One-hour idle disconnection. This ensures that idle resources are properly terminated from the server after a maximum period of one hour. The images below show the optimal settings (sites may choose to extend that time to two hours).
- Thirty-minute termination of disconnected sessions.
- Non-Administrator accounts should be restricted from accessing the server desktop.

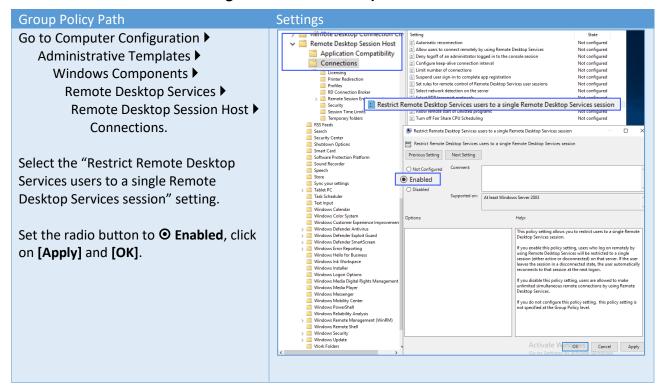
Sites can use Group Policy to limit the session timeouts and the number of connections per user or use Active Directory Users and Computers to set session timeouts. Group Policy allows setting these restrictions for all users or groups of users and is more efficient. There are command line options for these settings; use those if desired.

1.7.6.1 Use Group Policy

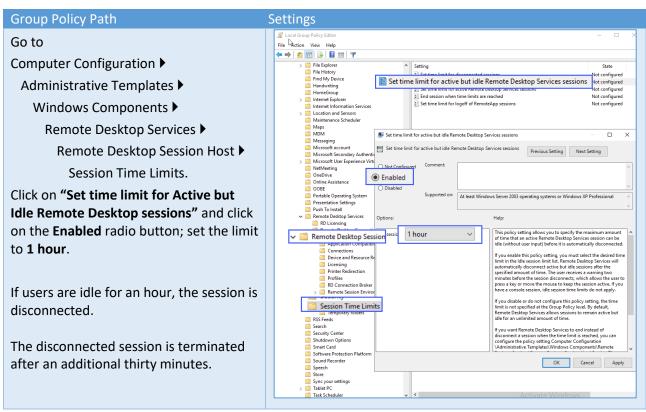
- Log into the server where the Remote Desktop Services are installed.
- Open the start screen (press the Windows key) and type gpedit.msc and open it.



1.7.6.1.1 Limit Users to a single Remote Desktop Session

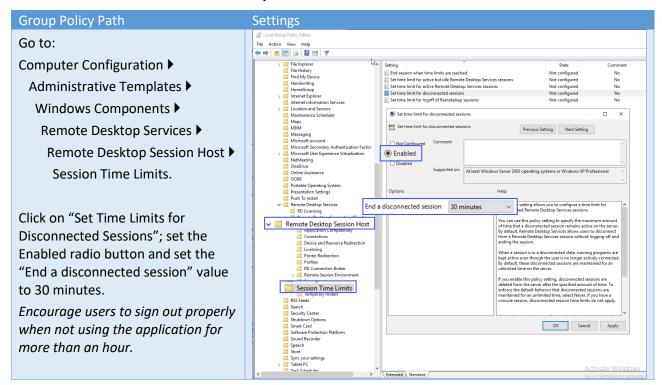


1.7.6.1.2 Set Time Limit for Active but Idle RDS Sessions



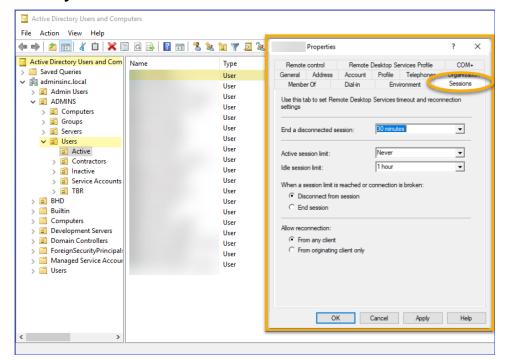


1.7.6.1.3 Set Session Time Limits for Disconnected Sessions



1.7.6.2 Use Active Directory to Limit Session Timeouts

When required, individual users can be updated via Active Directory. Update the users' [Sessions] tab as shown:





1.7.7 User Accounts - For Admins Support Staff

For **ADMINS, Inc**. to provide installation, training, and support services the following must be configured on the server before installation begins.

ADMINS asks that these accounts be established as local administrator (not domain) users and that the passwords be configured to **not expire**. These accounts should not be subject to the Restricted Desktop.

Requirement	Purpose
Create the following user accounts on the application server:	For use by ADMINS , Inc. , to provide installation, training, and support services.
MUPDEV1 MUPDEV2 MUPDEV3 MUPDEV4 MUPDEV5	Remote access to these accounts must be available such that all support staff may log on to the AUC server simultaneously to ensure that Customers receive highly responsive support. If a Customer does not comply with this requirement, support will be delayed. Configure all the listed MUPDEV* and AUC* accounts to have Local Administrator privileges to the application server.
AUCBATCH AUCDAILY	Two accounts used for scheduled tasks require Local Administrator privileges to the application server. Remote access is not required if the MUPDEV* accounts are all Local Administrator accounts.

1.7.8 Scheduled Tasks Minimum Priority

During the installation of the AUC software, ADMINS, Inc. will initiate several scheduled tasks that will run overnight to run specific tasks for daily, weekly, monthly, and year-end processing.

All **AUC** scheduled tasks need to run at a minimum priority of five (5). If the priority is lower (the higher the number, the lower the priority), the scheduled tasks could impact workday processing and stop users from accessing the **AUC** software as they will run longer than the recommended time.

1.7.9 User Accounts - For Customers' Users

The user accounts must be configured on the application server. Users must be restricted to one login session on the server per username. These must be fully configured and tested by the Customer prior to the start of Training services rendered by **ADMINS**, **Inc**.



All other user accounts accessing AUC	Notes
Usernames	The only special characters allowed within usernames are hyphen and underscore.
	The usernames should be configured as the standard username used on the domain. The AUC usernames must be the same as the Active Directory username.
	For installation purposes, ensure that all domain users who require access to the application are added to a group that allows RDP and access to the server. This ensures that the ADMINS Trainer will be able to assist all users in connecting successfully during their first logon attempt. These accounts must be setup and tested prior to the start of any scheduled training.

1.7.10 Attachments – Server/Folder Location(s)

AUC does not include a formal document management system but does allow for the unlimited attaching of external documents in many modules. Users can specify file and folder locations to an external document within the **AUC** application. Those documents must be stored on a networked device accessible by the **AUC** application. All security and restrictions to those folders/files is the responsibility of the Customer, not **ADMINS, Inc.**

Documents should not be moved, renamed, or deleted from these folders/files once specified in **AUC**. **AUC** does not maintain a dynamic link to these documents and bears no responsibility if the link is "broken" later. If changes are made, it is the users' responsibility to re-establish a proper link to the external document.

Identify a common folder to be used for User-Supplied Attachments. This folder may be on the AUC application server or some other shared file server.

Set up a mapped drive on the server to match what the users see so that the **ADMINS** support staff can troubleshoot issues.

The folder(s) should be shared and accessible by all users from their local machine(s). The mapped drive letter should be the same for all users to access the common area attachments. This folder should also be accessible by the **ADMINS** Support staff accounts.

Disk space required will vary with volume. **Moving or changing the name of these folders is not permitted** as static links to the files are embedded in the **ADMINS** record.

1.7.10.1 Purchasing Module

A folder to hold related documents e.g., a copy of a contract or quote and additional reference materials.



1.7.10.2 Accounts Payable:

A folder for related documents such as an electronic copy of an invoice or dispute letter.

1.7.10.3 Vendors

A folder for related documents such as a vendor W9 or insurance certificate.

1.7.10.4 Payroll

A folder for W4 or other onboarding documents or any other related documents.

1.7.10.5 Accounts Receivable

A folder for any user-supplied documents regarding receivables. An example could be an application for an abatement or a request for information from a customer or taxpayer.

1.7.11 Regular Maintenance

Sites should perform at a minimum monthly maintenance in a controlled manner to incorporate windows system updates and third-party software updates. Automatic updates are not recommended.

1.7.12 Third-Party Software Purchased & Installed by the Customer

The **AUC** application suite requires the following third-party software; pricing is subject to change. The Customer will purchase and license the following add-ins. The application suite will not be fully installed and available for use until all these components are installed successfully.

The customer can purchase and install these products independently. If requesting **ADMINS** to purchase and install these products, **ADMINS** will invoice the customer for the cost of these products and services required to perform the installation.

1.7.12.1 Current Web Browser

A currently supported web browser must be installed on the server to view XML-Based output files.

1.7.12.2 FTP Client

An FTP client such as FileZilla is required for **ADMINS**, **Inc.**, to provide installation, training, and support services. The FTP client is available at no charge from the http://filezilla-project.org.

1.7.12.3 Microsoft Excel®

Many **ADMINS** reports are available as **Excel**® –based reports; visit <u>www.microsoft.com</u> for licensing requirements; the number of licenses varies depending on the number of users/devices.



1.7.12.4 Microsoft .Net 8

Database connectivity for printing specialized forms available from www.microsoft.com, usually included in in the operating system.

1.7.12.5 Microsoft Remote Desktop Services (RDS)

RDS is required for Client/Server connectivity; for specifications, visit www.microsoft.com; the number of licenses varies by customer and depends on how many users/devices will access the AUC server.

1.7.12.6 Adobe Acrobat Reader DC (Document Cloud)

The **PDF**® reader is used for displaying reports and documents within the AUC application. The reader is available at www.adobe.com at no cost.

ADMINS recommends suppressing the display of the Tools Pane for all users, by doing the following:

- 1) Go to the Install directory
- Locate the AcroApp\ENU subfolder (e.g., "C:\Program Files (x86)\Adobe\Acrobat Reader DC\Reader\AcroApp\ENU"
- 3) Create a new subfolder called "TurnOff"
- 4) Move the following 3 files from the "\ENU" folder into the "\TurnOff" folder:
 - a) AppCenter_R.aapp
 - b) Home.aapp
 - c) Viewer.aapp
- 5) Open a PDF to confirm the Tools Pane is no longer displayed

1.7.12.7 WinSCP (optional)

The **ADMINS** installer will notify the site if this needs to be installed. WinSCP provides a command line interface to send / retrieve files via secure ftp (SFTP) to / from third-party sites such as banking institutions or utility billing services. The software is available for download from https://winscp.net/eng/index.php at no cost.

1.7.12.8 WinZip Pro v 23

WinZip is used to create archive files within the application and is available at www.winzip.com. The customer must install the command line interface add-on, available free with the purchase of WinZip from the WinZip web site

1.7.13 Client Workstation Configuration

The following are to be set up by the Customer on each user's workstation.

⁸If .NET is not automatically installed during Windows installation, .NET must be installed manually for proper rendering of Crystal Reports forms (checks, year-end forms, bills & reprints.

⁹Consult your ADMINS installer to ask if this is required for your site



1.7.13.1 Client Workstation Hardware

PCs should meet the following requirements:

Minimum Configuration	When buying new ADMINS recommends
Windows compatible PC ¹⁰ running Windows 10 Pro	Windows compatible PC ¹⁰ running Windows 10 Pro
17" Monitor ¹¹	19" Monitor or larger ¹¹

1.7.13.2 Connectivity Software – Remote Desktop Services

Install a shortcut on each user desktop to **RDP** to the **AUC** server. For Apple MACs, Windows offers a Remote desktop Connections Client. Get started with the macOS client | Microsoft Docs.

1.7.13.3 GoToMeeting Client Software

ADMINS uses GoToMeeting to provide remote installation, training, and support services. While the software will immediately open a web connection, users will have an easier time if the free plug-in is installed; available at GoToMeeting Web Conferencing & Online Meeting Software.

1.7.13.4 GoToResolve

ADMINS uses GoToResolve to provide support services. The software will immediately open a web connection, and users will be asked to share their screen.

1.7.13.5 Local Drive Access

To permit users to save files to:

- Any physical drive on their local machine
- Any mapped drive on their local machine
- Any physical drive on a networked machine
- Any mapped drive on a networked machine

1.7.13.6 Restricted Desktop Setup

Restrict all non-Administrator accounts from accessing the server desktop. See section 2.4 below and section 4 below.

2 ADMINS, Inc. Responsibilities

ADMINS partners with our clients to ensure that the AUC software operates optimally. The following are to be completed by **ADMINS**.

¹⁰ Only Professional editions of the client operating systems may be used as the home editions are not network capable

¹¹ The AUC application requires that the minimum resolution on the client monitor be set at 1024 x 768. A lower resolution is not supported.



2.1 Installation of AUC Software

The **AUC** application suite will be installed by the **ADMINS** Installation Engineer via a remote connection to the application server. This installation needs to be completed prior to any training and/or data conversion services being rendered.

When ready, please contact AUC Support at ADMINS, Inc., to begin testing:

617.494.5100 ext 2116

2.1.1 File Associations

ADMINS will associate the ".LIS" file extension with TedRe (<u>Text Editor Read Only</u>) program and ".RPT" file extension with the ADMCRV (**ADMINS** Crystal Reports Viewer) program.

2.2 Third Party Software Installed by ADMINS, Inc.

ADMINS, Inc. will perform the installation upon successful purchase of these products. The installation of these products is part of the installation costs of the **AUC** application suite. No additional installation charges will apply for the services listed in this section.

The application suite will not be fully installed and available for use until all these components are installed successfully. Therefore, neither training nor data conversion can begin until these steps are completed.

Note: Please make advanced arrangements before the software installation if **ADMINS, Inc.** is to purchase or acquire these components and subsequently invoice the site for the related charges.

2.2.1 ActivePerl 5.24.2

ActivePerl is a scripting language used within AUC. Please use exact version specified. Download it for free at http://www.activestate.com/ActivePerl/downloads

2.2.2 Azalea Software Bar Code Fonts and Dynamic Link Libraries

Azalea fonts are used to print bar codes on bills as required by the site and are optional. The source for the fonts is: Crystal Reports barcode software from Azalea Software (azaleabarcodes.com)

These fonts are to be installed by ADMINS to ensure font compatibility. The estimated cost is ~\$295.00.

2.2.3 Crystal Reports Runtime Components

To view and print all Crystal Reports included in the application:



- AP Vendor checks
- Purchase Orders
- Tax Bills and Reprints
- Municipal Lien Certificates

- HR Payroll checks
- 1099s
- Abatement/Exemption Certificates
- and any other Crystal Reports

To be provided by and installed by ADMINS. This component is provided at no additional cost to the customer.

2.2.4 PFE32

ADMINS uses PFE32 to view and edit text files when providing support. Download it for free at https://download.cnet.com/Programmer-s-File-Editor-32-bit/3000-2352 4-10002157.html

2.2.5 TrueType MICR Fonts

These fonts must be installed on the AUC application server and are required to encode a machine readable MICR line on AP Vendor and HR payroll checks. The estimated cost is \$30 - \$50. The source for the downloadable fonts is: http://www.fonts.com.

To be downloaded installed by ADMINS to ensure compatibility of MICR font.

2.2.6 TrueType OCR A Fonts

These fonts must be installed on the AUC application server and are used to encode a machine-readable scan line on bills and bill reprints. The estimated cost is \$30 - \$50. The source for the downloadable fonts is: http://www.fonts.com.

To be downloaded installed by ADMINS to ensure proper size and character set for scan line

2.3 Archive for Support Services

The **AUC** application is configured to create an on-line Zip archive of the application and data for a period of 7 to 30 days (depending upon available storage space). This process is not intended to replace any formal backup procedures needed by the Customer. The purpose of these on-line archives is for support services. This allows **ADMINS** to review and respond to changes that may have occurred in the past 7 to 30 days.

2.4 Restricted Desktop Setup

Restrict all non-Administrator accounts from accessing the server desktop. To configure desktop restriction, **ADMINS** will install a customized .BAT file in the ADMHOME folder for use in the remote desktop icon setup. See also section 4 below.



Blank Check Stock Specifications

These specifications pertain to Accounts Payable and/or HR Payroll Checks generated from the ADMINS Unified Community ("AUC") for Windows application suite.

Benefits		Specifications for Blank Check Stock	
The soft number over pre	ware can accommodate either blank or pre- ed checks. We recommend using blank stock e-numbered stock. The benefits include: The cost of blank stock is significantly less than pre-printed check forms. Clients may switch banks at any time and do not have to obtain new stock. Blank stock may be purchased in smaller quantities on an as-needed basis and minimize the storage space required for cases of paper. Check numbering is managed by the system eliminating headaches due to printing problems (misfeeds, upside down, etc) and check numbering. If the pre-printed stock provider makes an error in printing, there is recovery time associated with re-printing the order. Instead of a physical signature chip that must be secured and may not transfer to other printer models, the signatures are image files allowing easy updates as personnel change. On average, the cost of MICR toner is \$150- \$180. Over 25,000 checks may be printed with a single toner cartridge if the cartridge is used		□ 24 lb □ Two perforations — at 4" and at 7 ½ " from the top of the stock, allowing for a 3 ½ " check at the bottom of the 8 ½ by 11" sheet. Or, one perforation at 7 ½" from the top of the stock. ADMINS can accommodate self-sealer forms as well. Programming and testing for self-sealer forms will require additional time. □ Watermark embedded □ Laser Compatible 8 ½ by 11" sheets with one bottom check (perf at top of check; optional second perforation at 4" from the top of page) □ Border Warnings
	only for check printing.	Blank	s Stock Sources
Require	Blank check stock A printer for which MICR toner is available. MICR Toner. The average cost of MICR toner is \$150-\$180. Over 25,000 checks may be printed with a single toner cartridge (assuming the cartridge is used only for check printing). MICR True Type Fonts. The average cost is \$25	Conta These nor re	ect your bank or any other desired print vendor. I links offer some options but are neither endorsed ecommended by ADMINS. roducts The Tax Form Gals ottom Position Checks - Blank Check Stock tockChecks lank Laser Bottom Checks; Green Quill.com
_	to \$50.	- <u>D</u>	iank Laser Bottom Checks, Green Quint.com



3.1 Supplements

The following documents are supplemental specifications to this System Administration Kit. During the implementation phase, obtain the most current version of these requirements from **ADMINS**, **Inc**.

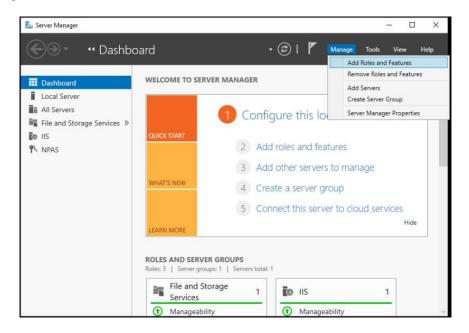
- Paper stock and envelope recommendations 1095C, 1099 and W2 Tax Forms
- Paper stock and envelope recommendations for Tax Bill, Miscellaneous Billing Invoices, and Detail Billing Invoices

4 Restrict Desktop

To prevent users from exiting from the **ADMINS** application and accessing the server desktop, **ADMINS** requires the use of a Restricted Desktop. To implement this requires that Remote Desktop Services role be added to the server.

4.1 Install Remote Desktop Services

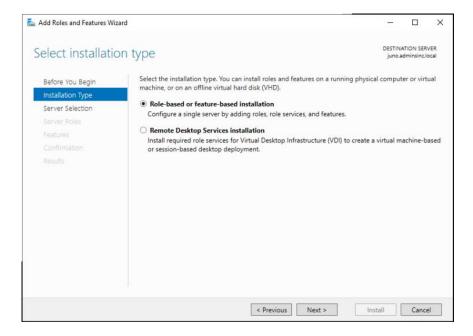
Open Server Manager on the ADMINS app server and select Manage Add Roles and features from the dashboard to launch the Roles and Features Wizard:





4.1.1 Select Installation Type

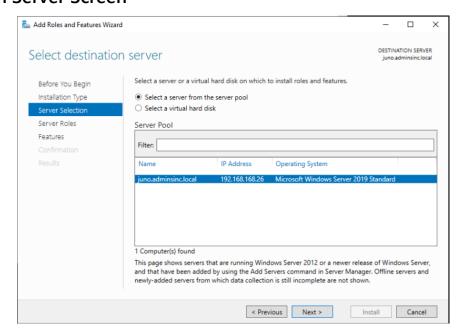
On the Select installation type screen, select ⊙ Role-based or feature-based installation and click on Next >:



4.1.1.1 Select Destination Server Screen

Then on the Select destination server screen, click on Server Selection, check ⊙ Select a server from a server pool, and select the ADMINS App server from the list:

Hit Next > to display the Select server roles screen:



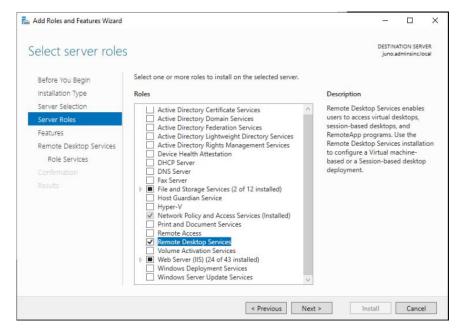


4.1.1.2 Select Server Roles

Select Server Roles, check

☑Remote Desktop Services:

Then click Next > to select the Role Services:

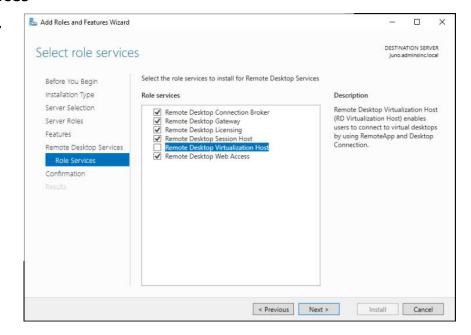


4.1.1.3 Select Role Services

On the Select role services screen, click on Role Services, and select the following roles:

- ✓ Remote Desktop Connection Broker
- ✓ Remote Desktop Gateway
- ✓ Remote Desktop Licensing
- ✓ Remote Desktop Session Host
- ✓ Remote Desktop Web Access

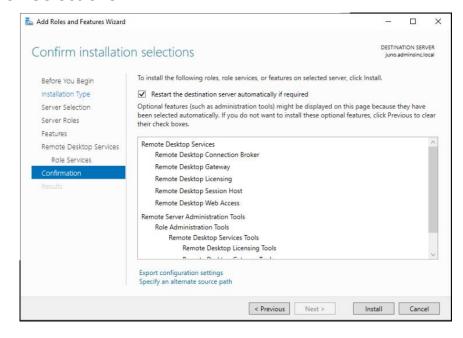
Click on Next > to display the Confirm installation selections screen:





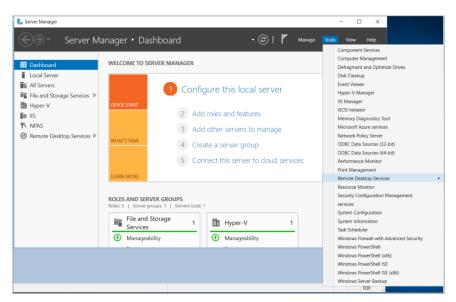
4.1.1.4 Confirm Installation Selections

On the Confirm installation selections screen, select the Confirmation window, check ☑ Restart the destination server automatically if required, and click on Install:



4.1.2 Publish App from Server Manager

Open Server Manager and go to Tools ▶ Remote Desktop Services ▶ QuickSessionCollection to publish the app for restricted desktop.

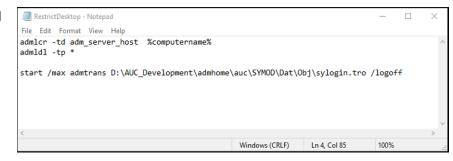




The RestrictDesktop.bat app should be in the **admhome** folder, for example:

d:\AUC_Development\
admhome\RestrictDesktop.bat

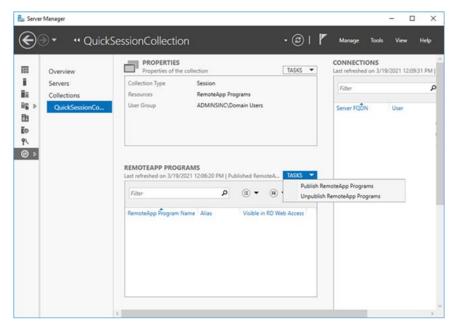
If not, create a batch file, RestrictedDesktop.bat, with the following content (sample below; replace the drive letter with the drive used on site for the AUC software):



admlcr -td adm_server_host %computername% admldl -tp * start /max admtrans D:\AUC_Development\admhome\auc\SYMOD\Dat\Obj\sylogin.tro /logoff

4.1.2.1 Quick Session Collection screen

From the REMOTEAPP
PROGRAMS, select TASKS Tand choose Publish
RemoteApp Programs from the drop-down list:



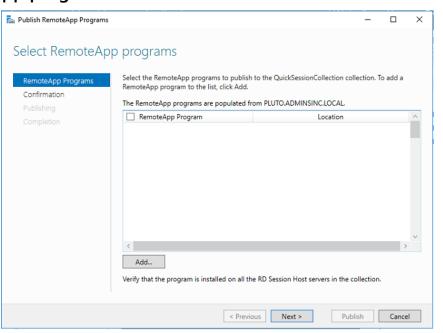


4.1.2.2 Select RemoteApp programs

From the Select RemoteApp programs screen, click on RemoteApp Programs.

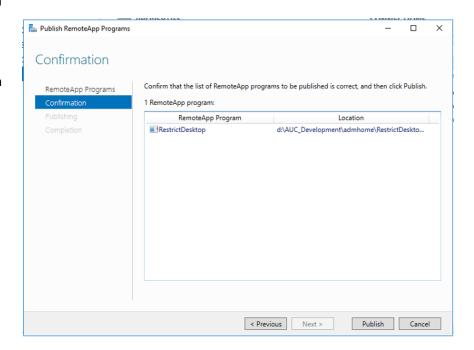
Click on Add..., enter a UNC path to publish the app, for example:

\\JUNO.ADMINSINC.LOCAL\d\$ \AUC_Development\admhom e\RestrictDesktop.bat



4.1.2.3 Confirmation

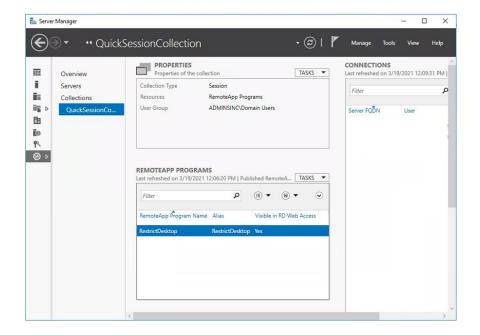
On the Confirmation screen, confirm that the list of RemoteApp programs to be published is correct, and then click Publish:





The **ADMINS**

RestrictDesktop.bat App will show in the QuickSessionCollection screen under REMOTEAPP PROGRAMS as RestrictDesktop:

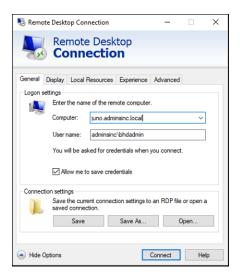


4.1.3 Connecting to the remote server



On the client computer, open **Remote Desktop Connection** app, **hit Show Advanced Options**:

Type the target server and user name, for example juno.adminsinc.local and adminsinc\bhdadmin, and then hit Save As, to save this custom connection:

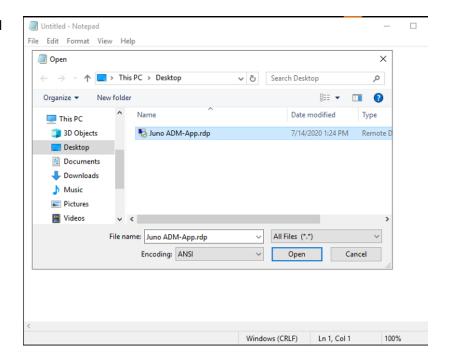


Open Notepad app, and go to **File Dopen**, change the drop down list from the bottom right to All Files (*.*) and select the custom connection file (or Right Click on the connection and select open with Notepad).



Look for the alternate shell:s: and shell working directory:s: rows:

prompt for credentials:i:0
negotiate security layer:i:1
remoteapplicationmode:i:0
alternate shell:s:
shell working directory:s:
gatewayhostname:s:
gatewayusagemethod:i:4



Add the following paths, (substitute the drive and paths names) for example:

d:\auc_development\admhome\restrict
desktop.bat
d:\auc_development\admhome

Save the changes and then connect using the custom **RDP** file.

prompt for credentials:i:0
negotiate security layer:i:1
remoteapplicationmode:i:0
alternate shell:s:d:\auc_development\admhome\restrictdesktop.bat
shell working directory:s:d:\auc_development\admhome
gatewayhostname:s:
gatewayusagemethod:i:4

4.1.4 Share the restrictdesktop.bat file

Place the RestrictDesktop.bat file in the ADMHOME folder and share it so that all users may access it.