

Arbutus Results Manager

INSTALLATION GUIDE



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About this Guide

This guide is provided to licensed users of Arbutus Results Manager to provide quick instructions on installing and configuring it.

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- A description of what you were doing when the problem occurred.
- The error message, if any is encountered.

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CHAPTER 1 INSTALLING AND UPDATING THE ARBUTUS RESULTS MANAGER

This section describes how to install and update the Arbutus Results Manager (RM). Results Manager requires installation of the corresponding version of the Arbutus Hub Server.

Minimum Recommended Resources

Before installing Results Manager, the following must be in place:

- You must first install the Arbutus Hub Server

The minimum recommended resources for running Results Manager are:

- The operating system should be at least Windows 10 (or later) or Windows Server 2016 (or later)
- An Intel i5 level processor (or equivalent)
- 32 GB of RAM (plus 1 GB of RAM per concurrent user, if greater)
- Sufficient hard disk space to meet analytic processing need

Installing Results Manager (Windows)

Arbutus does not currently use an MSI based installer but rather a zip file of all the parts required, which are in turn 'installed' and configured via a simple DOS batch file. If necessary, this DOS batch file and corresponding httpd.conf file may be edited before running install.bat to ensure maximum compatibility with your system and network environment.

It should be noted that if you have no existing Web Server running on port 80 on the same machine used to install Results Manager (RM) and you are OK with the default install location, you will still be required to edit the IP address and host-name of the Web Server in httpd.conf. Please ask your network administrator for the appropriate information.

To ensure the most efficient install, it is recommended that RM is installed on a machine that is not already running another web server.

Step 1 - Installing a New Instance of the Web Server for Results Manager

Note:(If updating an existing instance of RM, skip to "Updating an Existing Installation" on page 5)

To install a new instance of the Web Server for Results Manager, perform the following simple steps:

1. Download the Results Manager zip file called RManWCInstaller.zip from the Arbutus downloads page to the server you want to install Results Manager upon:

`https://www.arbutussoftware.com/en/download-software`

2. Unzip RManWCInstaller.zip to a folder on the server called "c:/temp"
3. Navigate to "c:/temp"
4. Right-click on the Install.bat and choose 'Run as Administrator'

Note: You could also open an Administrator command prompt and CD to the install.bat location and run it from the command prompt. You can log output of the install.bat for debugging by entering: install.bat 1> install.log 2>&1 at the Administrator command prompt.

Step 2 - Test the Web Server for Results Manager

Now that the Web Server component has been installed, ensure that the install was successful.

Open your browser of choice (Chrome or Edge are recommended) and type in the web address in the form:

`http://hostname/ip/result_manager/`

For example:

`http://192.168.1.64/result_manager/`

or

`http://abc_corp.com/result_manager/`

Note: No port number is required unless you will be assigning the Web Server to use something other than port 80. If that is the case, use `http://192.168.1.64:port/result_manager/` or `http://abc_corp.com:port/result_manager/` where "port" is the number being used by the web server.

If the login screen appears, the Web Server for Results Manager has been successfully installed and you can proceed to the next step.

If not, refer to "Customizing The Install" on page 6.

Step 3 - Create the RMUser Account

On the machine hosting the Arbutus Hub Server software, create a new user called RMUser

Note: This does not need to be an administrator account.

Step 4 - Copy the Results Manager Database Files

Results Manager is a separate piece of software that works in conjunction with the Arbutus Hub Server software.

The Arbutus Hub Server install copied the following files into the install folder:

- RM_Master_All_Data.zip

The data files should be unzipped into C:\Data\Arbutus\RM on the machine hosting the Arbutus Hub Server software. Ensure that the RMUser account (which you created in "Step 3 - Create the RMUser Account" on the previous page) is given full access to this folder.

Step 5 - Create the Encrypted Password for the RMUser Account

1. Navigate to the Hub install folder, then double-click on the RM_Password.EXE file.
2. Enter the password and press ENTER
3. Highlight the encrypted password supplied in the dialog and press ENTER to copy the encrypted password required in Step 6.

Step 6 - Edit the ArbutusS.INI file to enable RM

To complete the RM setup, you must edit the ArbutusS.INI file to enable RM:

1. On the machine hosting the Arbutus Hub Server software, using Task Manager stop the Arbutus Server service.
2. Copy the ArbutusS.INI file from the install folder to the desktop.
3. Open the INI file on the desktop.
4. On the line that begins with ;RMPass=, remove the semi-colon and everything after the "=" sign, then paste in the encrypted password you created and copied in Step 5.
5. On the line that begins with ;RMUser=, remove the semi-colon and everything after the "=" sign, then put RMUser (created in Step 3).
6. On the line that begins with ;RM=, remove the semi-colon and everything after the "=" sign, then put the folder location of the RM system data files performed in Step 4.
7. Save the ArbutusS.INI file

Once you have finished editing the ArbutusS.INI file on your desktop, do the following:

1. Cut the ArbutusS.INI file from the desktop and replace the one that is in the install folder.
2. In Task Manager, restart the Arbutus_Server service.

Step 7 - Configuring the Web Server's Address and Port

The final steps of the process are:

1. If the web server's listening port is not set to port 80, or if you want to change the web server's server name to be a registered DNS name instead of localhost, refer to steps 2 and 4 of the configuring Httpd.Conf section which can be found in "Httpd.conf" on page 6
2. Restart the Arbutus Web Server service.

Your RM installation is now complete!

Updating an Existing Installation

When updating an existing installation:

1. You must first run the Uninstall.bat file as an administrator. Running the Uninstall.bat file will create a backup of your existing configuration and database settings and place them in the c:\Arbutus default backup folder.
2. After running the Uninstall.bat file, you must run the Install.bat file as administrator to install a new installation. This will automatically reinstate any pre-existing configuration and database settings that were stored in the backup folder created by the running the Uninstall.bat file.
3. When updating an existing installation, be sure to unzip the file named below as you did in "Step 4 - Copy the Results Manager Database Files" on page 3.
 - RM_Master_Update_Data.zip

CHAPTER 2 CUSTOMIZING THE INSTALL

This section describes how to perform custom configurations for the Result Manager (RM) install.

Custom Configuration

If you do wish to customize your installation, the files that can be edited by the installer are:

- install.bat
- uninstall.bat
- httpd.conf
- settings.py

Install.bat

The default install location on the server is defined in the variable `WEBAPPS_BASE` in the file `install.bat`, and has a default value set to `"C:\Arbutus"`. You may change this path, however if you do so, you must use a path that has NO spaces in it. This in turn will assist in defining the variable `WEBAPPS_HOME`. (i.e. `WEBAPPS_HOME=%WEBAPPS_BASE%\WEBAPPS`). For example:

```
WEBAPPS_HOME -> 'C:\Arbutus\WEBAPPS'
```

Nothing else should require modification within the `install.bat`. There are various comments throughout the file to document the purpose of each step.

Note: The value of `WEBAPPS_HOME` variable in `httpd.conf` and the value of `WEBAPPS_BASE` variable in the `uninstall.bat` must be changed to match what is specified in the `install.bat`

Httpd.conf

Most sections in `httpd.conf` that may require modification include a comment line that starts with:

```
`# ARBUTUS NOTE -`
```

1. Change the `EM_HOME` variable to match the full absolute path used in `install.bat`:

```
Define WEBAPPS_HOME "C:/Arbutus/WEBAPPS"
```

```
...
```

2. Change the listening port (this is required if an existing web server is already installed and allocated to port 80):

```
Listen 80
```

```
...
```

3. Change the network or RM administrator email address:

```
ServerAdmin admin@example.com
```

...

4. If the ServerName value isn't a registered DNS name, enter the host's IP address as well as the port number, if port 80 is not being used (as entered in step 2 above):

```
ServerName localhost:80
```

...

There are other areas that can be fine-tuned in httpd.conf but should not be modified unless approved by the network administrator.

Note: To determine if and what may already be listening on port 80 (HTTP) and/or 443 (HTTPS) you can open a command prompt as administrator and enter netstat -ab or netstat -ao.

HTTPS and Certificates

We highly recommend that you use HTTPS for secure communications between your user's browsers and RM. RM will have both HTTPS and HTTP enabled with the Apache Web Server upon installation, however, you should contact your network administrator for assistance in an appropriate SSL certificate being configured and used to prevent browser warnings.

Edit Extra\Httpd-ssl.conf accordingly.

Note: Without the use of HTTPS, when users log into EM their login password will not be encrypted. This could compromise the security of your Windows server and/or network as the user's user name and password will be transmitted insecurely from the user's browser to the EM Web server.

Uninstall.bat

Change the WEBAPPS_BASE variable to match the value used in the install.bat and update any other hard coded paths that were modified in the install.bat.

The uninstall.bat will always backup the following files: settings.py, httpd.conf and the database file arbutus_db.sqlite3 in the WEBAPPS_BASE directory.

Note: To update an existing RM installation, you must first uninstall the existing installation using the Uninstall.bat

Settings.py

This file can be found in:

```
". . . \WEBAPPS\App\connectanywhere\connectanywhere\"
```

The settings.py file can only be edited post installation, after making all necessary changes to the Install.bat and the Httpd.conf files.

In the case where you have modified the ServerName in httpd.conf to something other than 127.0.0.1 or localhost, you will have to add ServerName value to the variable ALLOWED_HOSTS by appending your particular server name to the existing list, for example:

```
ALLOWED_HOSTS = ['127.0.0.1', 'localhost', 'CustomServerNameOrIP', ]
```

Customizing the ArbutusS.INI File

For Results Manager to function as you desire, the following RM entries in the ArbutusS.INI file on the Arbutus Hub Server can be customized for your organization (in the sections indicated below, example values are provided with indented comments):

```
[Arbutus Result Manager Info]
;RMSender=system@company.com
; RMSender is the email account name to send notifications from
;RMSMTPPass=E724...
;RMSMTP=smtp.company.com
; RMSMTPPass is the encrypted SMTP password of the sender, if required
; RMSMTP is the address of the SMTP email server
;RMDir=c:\RM\logs
;RMPort=587
; RMDir is the directory where notifications are logged
; RMPort is the port to access SMTP with
;RMDaily=8
;RMLang=0
;RMWeekend=SatSun
;RMHolidays=20240101,20240124,20240701,...
; RMDaily is the hour when daily notifications are sent
; RMLang is the RM language for messages. 0=English, 1=Trad. Chinese,
3=French, 4=Spanish, 5=Portuguese, 7=Simp. Chinese.
; RMWeekend is the weekend days, so notifications can be suspended
; RMHolidays is the days when holidays occur, so notifications can be
suspended
;RMSubjectOverdue=Result Manager activity overdue
;RMMessageOverdue=The following Result Manger activities are overdue:
;RMSubjectOutstanding=Result Manager activities outstanding
;RMMessageOutstanding=The following Result Manger activities are
outstanding:
;RMHTML=T
; RMSubjectOverdue is the subject line for 'overdue' notifications
; RMMessageOverdue is the message text for 'overdue' notifications
; RMSubjectOutstanding is the subject line for 'outstanding'
notifications
```

```
; RMMessageOutstanding is the message text for 'outstanding'  
notifications  
; RMHTML indicates if the messages are sent as HTML
```