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## Architecture Overview - Hosting Provider

<https://campus.barracuda.com/doc/85492715/>

Barracuda Managed Workplace is made up of four components:

- Service Center
- Onsite Manager or Device Manager
- Support Assistant
- Barracuda Managed Workplace Update Service

Service Center is installed on one or more servers in your network or in a data center. Service Center is the web-based management application where users perform their work and also the databases where all the client information resides.

Onsite Manager and Device Managers collect client data and send it to Service Center over the Internet. Use Onsite Manager to collect data and manage many devices. Use Device Manager to collect data and manage a single device.

The Onsite Manager performs agentless monitoring, collecting information from all types of IP-based devices, including computers running any operating systems as well as routers, printers and other infrastructure devices.

The Device Manager is an agent, monitoring information only from the device upon which it is installed.

Both Onsite Managers and Device Managers regularly initiate outbound communications to Service Center to receive new instructions and upload the data that has been collected.

**Note:** Barracuda Managed Workplace doesn't support the monitoring of clusters.

### Service Center

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Service Center itself is made up of a database server and two or more application servers. These are installed on multiple computers to provide the high performance required for many tenants. Application servers can be added to the deployment in order to scale to the occupancy-based load.

Service Center has two major components: a database server and an application server. The database server component requires Microsoft SQL Server. The application server is comprised of .NET Windows services and web applications using IIS. These can either be installed on a single computer or on multiple computers to provide the high performance required for larger deployments.

**Important:** Beginning with a single server deployment and growing to the point where another is required consumes time to migrate the production system, which means downtime for your clients. As such, you may decide to use two servers from the start. You should review the sizing guidelines in this document to understand the requirements as your customer base expands.

For information about the Service Center requirements, see [Service Center](#).

## Database Server

Service Center uses Microsoft SQL Server to house the Barracuda Managed Workplace databases:

**SCData\_Default** The primary database, containing information that has been collected about your clients' environments, including Barracuda Managed Workplace users and user-defined configurations, scripts, reports and other binary files.

**SCMaster** Contains global configuration settings that define how your Service Center operates.

**MWSessionState** Used to separate dynamic user sessions from one another so that users do not see each other's data.

The reporting functionality of Barracuda Managed Workplace relies on SQL Reporting Services and so the following databases are also present:

**ReportServer** is a native database for SQL reporting services.

**ReportServerTempDB** is a native database for SQL reporting services used as scratch space for reporting operations.

## Application Server

The application server runs Microsoft .NET Framework web applications using Internet Information Services (IIS) as the web server and .NET Windows Services for data processing. These websites are created either as New Websites or Virtual Directories:

**SC** The web interface used to view information, work with alerts and tickets, generate reports and launch remote control sessions.

**SCMessaging** The web service for receiving collected information sent to Service Center by the Onsite Managers and Device Managers. It also contains a service for interacting with other applications, such as Professional Service Automation (PSA) systems.

The application server uses this Windows Service:

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**Service Center Monitor** The listener for the SCMessaging web service, receiving information from Onsite Managers and Device Managers.

## Other Applications

Service Center can optionally integrate with other applications to extend workflow capabilities:

**PSA applications** Provides integration with third-party professional services automation (PSA) systems for comprehensive ticket tracking and issue management. Most partners use a PSA system to assist them with project and resource management. Service Center integrates with the most popular, powerful applications available today, and can also be integrated with custom solutions.

## See Also

[Professional Services Automation \(PSA\) Integration Guide](#)

## Onsite Manager

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Onsite Manager uses Microsoft SQL Server 2014 Express edition and .NET Windows Services. It is capable of handling up to 1000 devices, in healthy environments with basic monitoring requirements. As such the database engine and the application reside on the same physical server. Dedicating a server to Onsite Manager is recommended for larger networks and when more thorough or frequent monitoring is required. For an average SMB client, you can typically install Onsite Manager onto a shared server.

**Best Practice:** When deploying a single Onsite Manager to monitor more than 500 devices, start with a basic monitoring service policy set, and layer in other monitoring, automated tasks, and patch management activity one

configuration at a time, keeping track of any changes to the performance of the server at each stage (CPU, RAM, and disk activity).

### Database Component

The Onsite Manager uses Microsoft SQL Server 2014 Express, included in the installation package, to house the Barracuda Managed Workplace database:

**MWData** Stores the monitoring rules that have been defined in Service Center, which direct the activities of the Onsite Manager application. It also contains the information about IP addresses and their associated devices. During periods where Internet connectivity is interrupted, monitoring data is queued in the database to be sent to Service Center once the connection has been restored.

**Best Practice:** Install Microsoft SQL 2014 Management Studio Express when you install Onsite Manager so that you have a tool to back up your database, and are ready to receive technical support should it be required.

## Application

The Onsite Manager application makes use of three Windows services:

**MWExpertSystem** Handles all the querying of managed devices for data, and also listens for data being sent to it, such as SNMP traps or Syslog messages. To function correctly, it must run with Administrator privileges to ensure it can gather all the information you are requesting from the devices.

**MWExpertSystemHelper** Uses Microsoft Background Intelligent Transfer Service (BITS) to download large automated task files from Service Center.

**OMNetworkService** Controls all the remote sessions users launch.

## Device Manager

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Device Manager is the functional equivalent of the Onsite Manager but monitors and manages a single device only. Device Manager can be deployed to a Windows or Mac OS X device. There is a lightweight database that is bundled with the application for data storage.

On Windows devices, the Device Manager makes use of a single Windows service:

**MWExpertSystem** Runs under the security context of the Local System account unlike that for the Onsite Managers. Also, because only a single device is being managed, the transfers normally handled by the MWExpertSystemHelper and remoting normally handled by the OMNetworkService are included in this service.

## Support Assistant

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Support Assistant is your company's brandable presence on managed Windows and MAC OS X devices and includes a context menu and an icon which is delivered in one of two ways:

- as a recommended feature of the Device Manager when the profile used is configured to display an icon in the notification area
- independently by configuring an automated task

The brandable icon can be a 16 x 16 pixel image of your corporate logo, or any other icon that you choose. You can also add another icon to indicate a fault state so the user knows when something is not working properly with the Device Manager.

You can determine what additional functionality is offered on the context menu, which end users will access by clicking the icon. For example, you can include text-based messages for the end user, shortcuts to email and web addresses, allow them to request live chat or remote assistance, and offer the ability to send trouble tickets to Service Center.

### **Barracuda Managed Workplace Update Service**

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Barracuda Managed Workplace Update Service (MWUS) is a web service that patch manages Device Managers. Update Service installs automatically when you install Barracuda Managed Workplace, whether or not you use Device Managers.

When Update Service is installed, a new database is created.

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