



# **QPR Search Central**

## **Installation Guide**

Version 2015.1.0

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# 1 Introduction

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QPR Search Central integrates Microsoft SharePoint search technology into QPR Portal. Compared to the default QPR Portal search, QPR Search Central provides improved search performance and the ability to search inside attached documents.

## 2 Requirements

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The requirements for installing QPR Search Central are as follows:

- Microsoft SharePoint 2010 Server or Microsoft Search Server Express
- Microsoft Active Directory Authentication used for SharePoint and QPR
- Administrator access to SharePoint 2010 and SharePoint 2010 Management Shell
- QPR 2015.1
- At least 16 GB of memory recommended on the server computer
- Business Data Connectivity Services installed on SharePoint
- SharePoint Search Service (FAST Search is not currently supported)

### 3 Installation

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Follow the steps below to install QPR Search Central.

1. Launch SharePoint 2010 Management Shell as Administrator.
2. Make sure that the SharePoint 2010 Administration service is running. If not, start it from the Services panel or run `Start-Service spadminv4` in PowerShell (`net start spadminv4` in the standard command line)
3. Make sure that PowerShell is set to use an execution policy that allows scripts to be executed. Use the `Get-ExecutionPolicy` commandlet to see your current level and `Set-ExecutionPolicy` to loosen restrictions for the duration of QPR Search Central configuration if needed.
4. Update the variables in `Configuration.ps1` script to match your environment.
5. Add user with login "NETWORK SERVICE" into QPR UMS as system administrator. If you changed the crawling account in `Configuration.ps1`, add a corresponding user into QPR UMS. Note that user rights of this user define the maximum scope that is crawled.
6. Run the `SetupQPRSearchCentral.ps1` script. Note that in non-English SharePoint environment you may need to provide values to the script during the installation.
7. Configure search server location into `QPR_Servers.ini` and restart QPR services
8. Restore the PowerShell execution policy

After the installation is complete, review the crawl schedule and set new full crawls to be completed at suitable intervals depending on the size of your QPR database. Crawl settings can be reviewed in SharePoint 2010 Central Administration -> Application Management -> Manage Service Applications -> Search Service Application -> Content Sources.

## 4 Configuration

The default configuration values for QPR Search Central assume that QPR installation resides on the same computer with Microsoft SharePoint. If QPR installation resides on a different computer, then at least the following values need to be changed in Configuration.ps1:

- \$qprWsUrl: QPR Web Services Server URL
- \$qprLogPath: Log path and filename for crawler log. Note that the folder hierarchy defined in the path must exist in order for the log to be written, so without a QPR installation on the same computer changes are necessary here.
- \$webContentUrl: Web content URL, modify this to point at your QPR Portal installation.

The log path and QPR Web Services Server URL can be checked and reconfigured when QPR Search Central is already installed by running the ConfigureBdcModel.ps1 script. Note that running this script requires that Configuration.ps1 is located in the same folder with valid configuration values. If you reconfigure either setting with the ConfigureBdcModel script, SharePoint Search services are restarted, but you should also run iisreset after the operation to make sure all changes are propagated into use. Due to these restarts, reconfiguration should be done within agreed maintenance windows or outside peak hours.

For testing SSL setups on a test environment with self-issued certificates (i.e. ones that don't link to an official certification authority) it is possible to instruct the connector to ignore the fact that the trust chain is incomplete. To do this, run the following in SharePoint 2010 Management Shell:

```
$rootUrl = <your SharePoint root URL from Configuration.ps1>
$lob = Get-SPBusinessDataCatalogMetadataObject -BdcObjectType "LobSystem" -Name
"Qpr.Model" -ServiceContext $rootUrl
Set-SPBusinessDataCatalogMetadataObject -Identity $lob -PropertyName
"BypassCAVerification" -PropertyValue "1"
$lob.update()
```

To revert the changes, run the above script otherwise similarly but with -PropertyValue "". This bypass should never be used in production environments.

## 5 Upgrade

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If you are upgrading QPR Search Central from an earlier version, uninstall QPR Search Central with the Uninstall.ps1 script supplied with the earlier QPR version before installing the new one. However, if you are upgrading QPR 8.2 Search Central to QPR 2015 Search Central, remove the QPR 8.2 Search Central using the Uninstall.ps1 script supplied with QPR 2015. The uninstallation script supplied with QPR 8.2 does not remove the BDC model, so for instance QPR Web Services Foundation URL will be incorrect in the new installation.



## 6 Uninstallation

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To uninstall QPR Search Central from Microsoft SharePoint 2010, stop the QPR service and run Uninstall.ps1 from the SharePoint 2010 Management Shell. You will have to confirm many of the uninstallation steps.

## 7 Troubleshooting

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This section provides tips for solving most frequent installation and configuration issues related to QPR Search Central.

### Installation

Status of the installation can be checked with the CheckSearchCentral.ps1 script available in the same folder as other QPR Search Central setup scripts. The script requires that Configuration.ps1 with valid values (preferably the one used in the original QPR Search Central installation) resides in the same folder.

### Crawling

If crawling doesn't work (stops really soon and log contains only errors), the most common reasons are the following:

- Integrated Windows Authentication to QPR Web Services Server fails
  - Check that the crawling account exists in UMS
  - See whether servicetester (see Appendix D in QPR - Installation Instructions document) works with single sign-on

### Installation issues when .NET 4.5 is installed

If Microsoft .NET Framework 4.5 is installed on the computer, there may be issues with launching SharePoint 2010 Management Shell. This is because .NET 4.5 comes with PowerShell 3.0 and some of the SharePoint commandlets are compatible only with version 2.0 of Powershell. Please see <http://blogs.technet.com/b/praveenh/archive/2013/01/15/sharepoint-2010-management-shell-does-not-load-with-windows-powershell-3-0.aspx> and <http://support.microsoft.com/kb/2796733/en-us> for more information and instructions for solving the issue.

QPR Suite 2015.1 installs Microsoft .NET Framework 4.5 when QPR Web Services Server is installed.