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SMARTER WORKSPACE – BETTER LIFE

Silverback by Matrix42

Silversync On Premise Solution Design Brief 5.1 U3

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1. Solution Architecture

1.1. Server Hardware and Software Requirements

Silversync Server

- Windows Server 2012 R2 – Windows Server 2008 onwards is supported, but it is recommended to use 2012 R2.
- 64 Bit CPU, 2.6 GHz Xeon or faster
- 4GB RAM
- 10GB of free disk space
- SCSI or SAS speed disks or equivalent SAS
- 1GB Network Interface Cards
- The server must be configured for US English including:
  - Use the date and time format DD/MM/YYYY
  - Use English System Locale for non-unicode programs
  - Use English Display Language and Input Language for all users, including “Network Service”

To facilitate an efficient and trouble free installation we require that any server hardening be enforced after the Silversync software has been installed and configured.

It is possible to allocate users an amount of storage for their personal files on the server. Ensure that the server has sufficient space to accommodate files to be synchronised to devices.

1.2. Setup, Admin and User Requirements

Additional Software Dependencies

Silverback requires that the following be installed on the server; these are readily available by configuring server roles or for download from Microsoft:

- Silverlight
- Microsoft Access Database Engine x64 2010
- .NET 3.5
- .NET 4.0
- .NET 4.5
- .NET 4.5.1 – Note: If you use Server 2012 or later this is pre-installed.
- IIS 8

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- For IIS, the following IIS Role Services must be enabled:

- [x] Web Server (IIS)
  - [x] Web Server
    - [x] Common HTTP Features
      - [x] Default Document
      - [x] Directory Browsing
      - [x] HTTP Errors
      - [x] Static Content
      - [x] HTTP Redirection
      - [ ] WebDAV Publishing (Not installed)
    - [x] Health and Diagnostics
      - [x] HTTP Logging
      - [ ] Custom Logging (Not installed)
      - [ ] Logging Tools (Not installed)
      - [ ] ODBC Logging (Not installed)
      - [ ] Request Monitor (Not installed)
      - [ ] Tracing (Not installed)
    - [x] Performance
      - [x] Static Content Compression
      - [ ] Dynamic Content Compression (Not installed)
    - [x] Security
      - [x] Request Filtering
      - [ ] Basic Authentication (Not installed)
      - [ ] Centralized SSL Certificate Support (Not installed)
      - [ ] Client Certificate Mapping Authentication (Not installed)
      - [ ] Digest Authentication (Not installed)
      - [ ] IIS Client Certificate Mapping Authentication (Not installed)
      - [ ] IP and Domain Restrictions (Not installed)
      - [ ] URL Authorization (Not installed)
      - [ ] Windows Authentication (Not installed)
    - [x] Application Development
      - [x] .NET Extensibility 3.5
      - [x] .NET Extensibility 4.5
      - [ ] Application Initialization (Not installed)
      - [ ] ASP (Not installed)
      - [ ] ASP.NET 3.5 (Not installed)
      - [x] ASP.NET 4.5
      - [ ] CGI (Not installed)
      - [x] ISAPI Extensions
      - [x] ISAPI Filters
      - [ ] Server Side Includes (Not installed)
      - [x] WebSocket Protocol
  - [ ] FTP Server (Not installed)
  - [x] Management Tools
    - [x] IIS Management Console
    - [ ] IIS 6 Management Compatibility (Not installed)
    - [ ] IIS Management Scripts and Tools (Not installed)
    - [ ] Management Service (Not installed)
- [ ] Windows Deployment Services (Not installed)

Silversync System Admin and End User Access

Access to Silversync for End Users, and System Administrators is via a web-based console. Supported browsers are:

- Safari 4 and above
- Internet Explorer 9 and above
- Safari on an iPad

When managing their own content via Personal File Management, If the user's web traffic is processed by a web proxy then care must be taken to make sure the proxy server can serve the Silversync PFM (Personal File Management) web site. If this is not possible, proxy server exclusions must be set to allow direct access to the site.

1.3. Account Requirements

Silversync Server

To install the Silversync Server a domain account that is a member of the Local Administrators group is needed. If installing in a workgroup environment, a local administrator account is needed.

Silverback has two methods of access files for users. These are called Server Based and User Based.

- Server Based authentication means that the service account on the server will access the files on behalf of the user. This means only the service account for the Silversync server needs access to the files.
- User Based authentication means that the individual user's file permissions are used. This means that a user must be granted read permissions on a file before they will be able to sync it.

If you intend to use User Based Authentication, you should run the installer as a Domain Administrator, as the system needs to configure permissions for the user to access the files.

2. Environmental Requirements

2.1. Network Requirements

As Silversync connects to external and internal systems, you need to ensure that the following connectivity items are configured.

Note that if you intend to use User Based authentication for file access, more ports may be required for KCD authentication depending on your AD specification and Forest Functional Level.

Silversync External Firewall Rules

Traffic Source	Destination	Port/Protocol
Devices (External)	TMG Server or Reverse Proxy (DMZ)	443/tcp

Silversync Publishing Firewall Rules

Traffic Source	Destination	Port/Protocol
TMG Server or Reverse Proxy (DMZ)	Silversync Server	443/tcp

Silversync Server Function Firewall Rules

Traffic Source	Destination	Port/Protocol
Silversync Server	Domain Controller	389,636/tcp
Silversync Server	Silverback Server	443/tcp

User & Management Firewall Rules

Traffic Source	Destination	Port/Protocol
User Devices (Wi-Fi)	Silversync Server	443/tcp

2.2. DNS Setup

The Silversync server needs to be accessed from the Internet and the internal network; therefore, you need to create DNS entries in your respective DNS servers (where ***yourcompany.com*** is equal to the external company domain name).

- The external DNS name for Silversync is **silversync.*yourcompany.com***
- The internal DNS name for Silversync is **silversync.*yourcompany.com***

An authoritative DNS aliases needs to be created for **silversync.*yourcompany.com*** and it must resolve to IP the external interface of the TMG server or DMZ Proxy.

An internal DNS aliases needs to be created for **silversync.*yourcompany.com*** and it must resolve to the Silversync server interface.

2.3. SSL Certificate Requirements

Silversync Web Site Certificate

The Silversync solution allows users to securely synchronise content to their devices and requires an established trust relationship between the device and server.

The Silversync web service requires one (1) certificate signed by a Certificate Authority trusted by the devices. The certificate must also match the DNS Name outlined in Section 2.2.

A full list of iOS trusted Certificate Authorities is available at:

http://support.apple.com/kb/HT5012.

The Silversync Website Certificate is a core requirement for Silversync to function, please have the PFX/P12 Certificate Bundle available for installation.