to	Spark installer

Memo

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project	Spark
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our reference	FHIR_MMSparkDeployment1-1
about	Deploying Spark

Hello,

You wish to deploy the Simplifier Spark FHIR Server to a machine of your own. This memo tells you how to do that.

Install prerequisites

Install the following prerequisites.

Please make sure to install IIS first, and ASP.Net 4.6 later. IIS comes with ASP.Net 4.5, and if you do 4.6 first, the IIS installation will break 4.6.

If you have a different operation system, e.g. Windows 10, you may already have ASP.Net 4.6 available. In that case you do not need to install it.

Install IIS

1. Open Server Manager > Dashboard
2. Add roles and features
3. Select "Web Server (IIS)"
4. Make sure to include Management Tools > Management Service (needed if you want to enable Web Deploy for non-administrators)

Install Web Deploy

1. Download Web Platform Installer, and run it (wpilauncher.exe)
2. Select "WebDeploy 3.6 for Hosting Servers"
3. Install
4. More info, especially for configuring Web Deploy for non-administrators.

Install ASP.Net 4.6

1. Spark is built on .NET Framework 4.6, but Azure Virtual Machine does not support this natively.
2. So download it from http://www.microsoft.com/en-us/download/details.aspx?id=48130
3. Install it by running the just downloaded NDP46-KB3045560-Web.exe.

Install MongoDB

1. Install MongoDB as a service (based on MongoDB documentation):
2. Download MongoDb, choose the Community edition, "Windows Server 2008 R2 and later, with SSL support"
3. Run the installer,
4. By default it will be installed in C:\Program Files\MongoDB\Server
5. Create directories for the database, log files and configuration of Mongo. For example:
6. C:\Spark\MongoDb\Data
7. C:\Spark\MongoDb\Log
8. C:\Spark\MongoDb\Config
9. Create a configuration file for MongoDb in the Config directory, name it SparkMongoDB.cfg and add the following to it (adjust to your previously created directories). Please pay attention to the indentation by spaces on lines 2,3 and 5.

```
systemLog:
   destination: file
   path: c:\Spark\MongoDB\Log\mongod.log
storage:
   dbPath: c:\Spark\MongoDB\Data
```

10. Run the command below in a Command Line, as Administrator. It will register MongoDb as a Windows Service.

```
c:\Program       Files\MongoDB\Server\3.2\bin>mongod.exe       --config
"C:\Spark\MongoDB\Config\SparkMongoDB.cfg" --installLocal Firewall
```

Deploy Spark

By Web Deploy Package

1. Connect Remote Desktop Manager to your VM, and select the option to make your local disks available to the VM.
2. In the VM, open Windows Explorer and copy the deployment package to a local directory on the VM.
3. Read (from the deployment directory) the Spark.deploy-readme.txt.
4. Open SetParameters.xml
4.1. Adjust FHIR_ENDPOINT to the url you run Spark on. Don't forget the /fhir part at the end.
5. Start a Command Window as Administrator and run (from the deployment directory) Spark.deploy.cmd /Y

Check Spark

Open a browser on the server and try http://localhost/spark
If that works, try the same from your own machine, with http://<ip-adress-of-vm>/spark.

Fill Spark

You can load the examples from the specification by going to:
 http://<ip-adress-of-vm>/spark/maintenance/initialize.

Kind regards,
Simplifier