Maternity Tracker – FTL Installation Guide

Version 1.0

ABSTRACT

This document describes the steps for installing Maternity Tracker code within VistA FTL.

 It is meant to be a live document; therefore, it will be updated frequently.

REVISION HISTORY

Version	Date	Modified By	Description
1.0	10/04/2017	Alina Frey	Initial Release
1.1	10/06/2017	Josh Stephens	Added steps for Dashboard deployment to IIS

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1   Paths for consideration

The following are a few paths that will be used throughout the installation document:

1.1 Paths to consider on FTL machine

1. Path to Maternity Tracker folder:
    `<FTL_path_to_MT>`: **/home/`<FTL_username>`/MTkids**

2. Path to kids **builds** folder:
    `<FTL_path_to_builds>`: **`<FTL_path_to_MT>`/builds**

3. Path to kids **TITLES** folder:
    `<FTL_path_to_TITLES>`: **`<FTL_path_to_MT>`/TITLES**

1.2 Paths to consider on your local machine

1. Local path to Maternity Tracker folder:
    `<LOCAL_path_to_MT>`: C:\Users\\`<LOCAL_user_name>`\Projects\Maternity-Tracker

2. Local path to kids **builds** folder:
    `<LOCAL_path_to_builds>`: **`<LOCAL_path_to_MT>`/builds**

3. Local path to kids **TITLES** folder:
    `<LOCAL_path_to_TITLES>`: **`<LOCAL_path_to_MT>`/TITLES**

2   Required Machines with Admin credentials

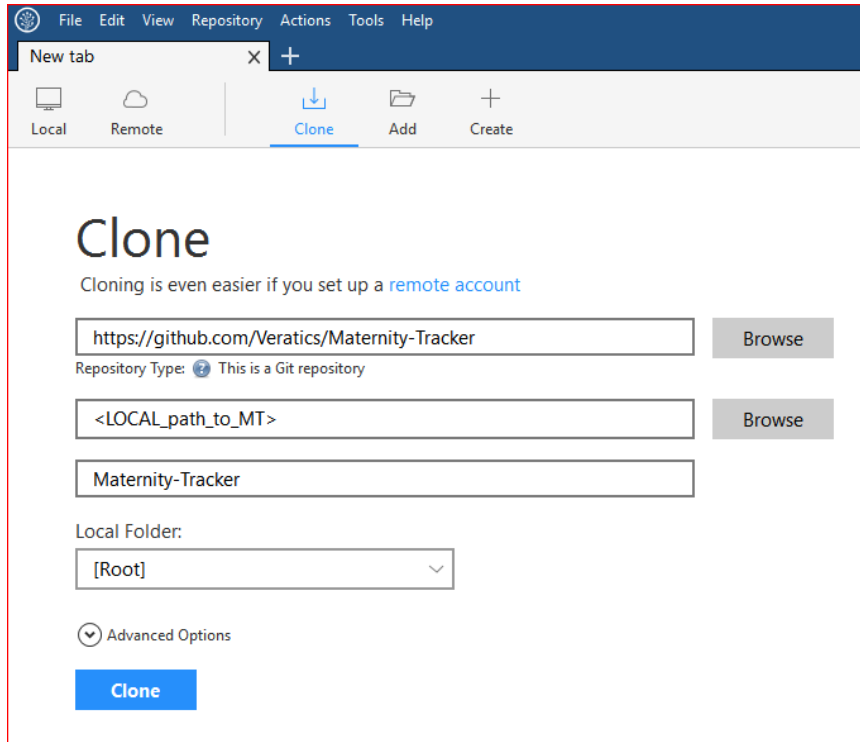1. Linux hosted VistA instance running on Cache
   a. Hosts the Maternity Tracker VistA package KIDS builds
2. Windows Server 2012 hosting Internet Information Servers (IIS) v8.5 with Web Deployment Package installed.
   a. Hosts the Maternity Tracker Dashboard web server
3. Windows Machine running Microsoft Visual Studio
   a. Machine used for development and publishing the changes.

3   Maternity Tracker Dashboard Local Setup

3.1   Cloning Maternity Tracker repository on the local machine

This step is necessary to get hold of kid files necessary in the next chapter.

1. If the Veratics Maternity Tracker project does not exist, create Maternity Tracker Repo on GitHub:
   a. Login to Veratics' GitHub: https://github.com/veratics/
   b. Fork https://github.com/VHAINNOVATIONS/Maternity-Tracker
   c. This will create this repo: https://github.com/Veratics/Maternity-Tracker
2. Download and install SourceTree for Windows:
   a. https://www.sourcetreeapp.com/
3. Clone Maternity Tracker repo in SourceTree:
   a. File >> Clone/New.
   b. Fill in the required fields:
      i. Source Path: https://github.com/Veratics/Maternity-Tracker
      ii. Destination Path: `<LOCAL_path_to_MT>`
      iii. Name: Maternity-Tracker

3.2   Installing Visual Studio

1. Download and Install Visual Studio Professional 2017:
    a. https://www.visualstudio.com/vs/professional/
2. Modify the install to add C# Template (only if Visual Studio is missing the C# template):
    a. Go to **Start >> All Programs >> "Visual Studio 2017" >> "Visual Studio Installer".** Now, click Visual Studio Installer.
    b. Click **Yes** button and the Visual Studio Installer will open.
    c. There are three options we can see in the installer: Modify, Repair, Uninstall
    d. Choose **Modify** option.
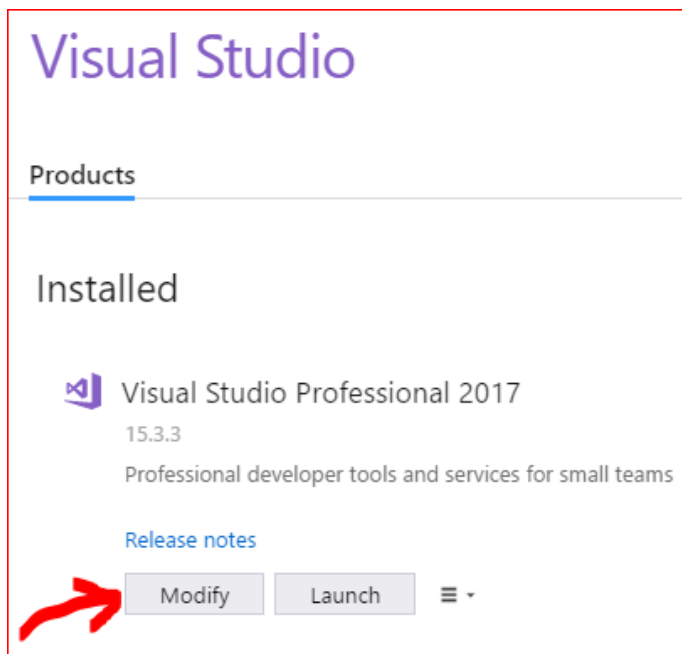
    e. Add ".NET desktop development" package:
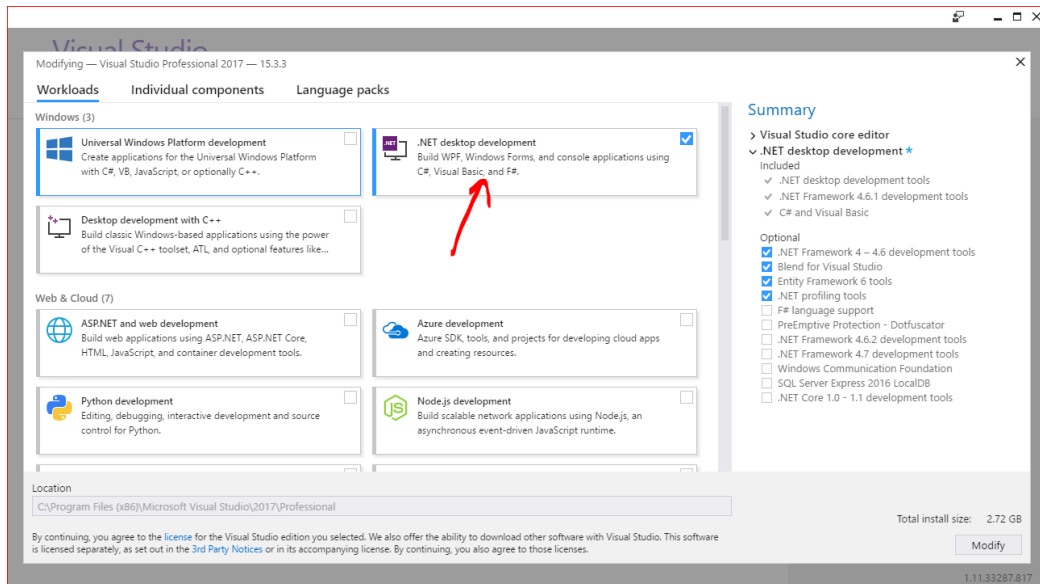
 f. Click **Modify** button.

3.3 Adding Maternity Tracker project to Visual Studio

1. File >> Open >> Open form Source Control. This opens the Team Explorer Pane. At the top, click on Connect button (the green plug), and click on Add under the Local Git Repositories section. Add the location of the repositories.
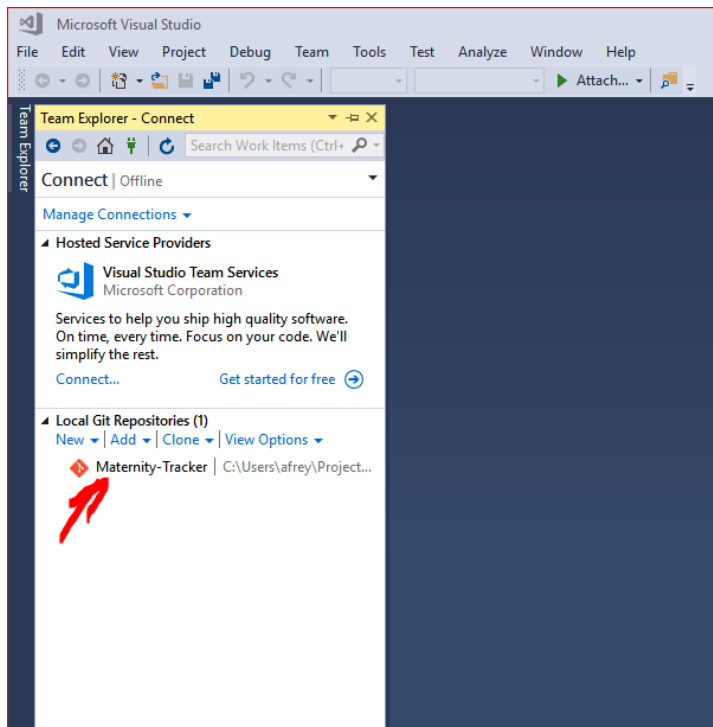
2. Double click on the **Maternity-Tracker** repo. This opens the Team Explorer panel with the solutions of the project.
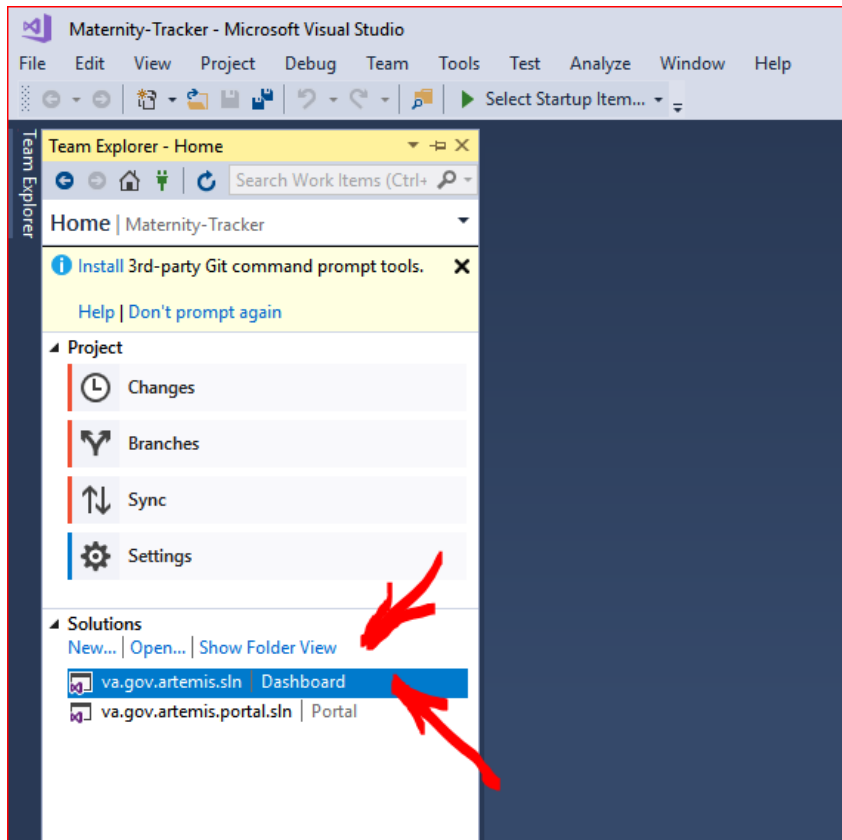
3. Double click on the first solution: **va.gov.artemis.sln.**

4. It will ask to install missing features. Click **Install** button.
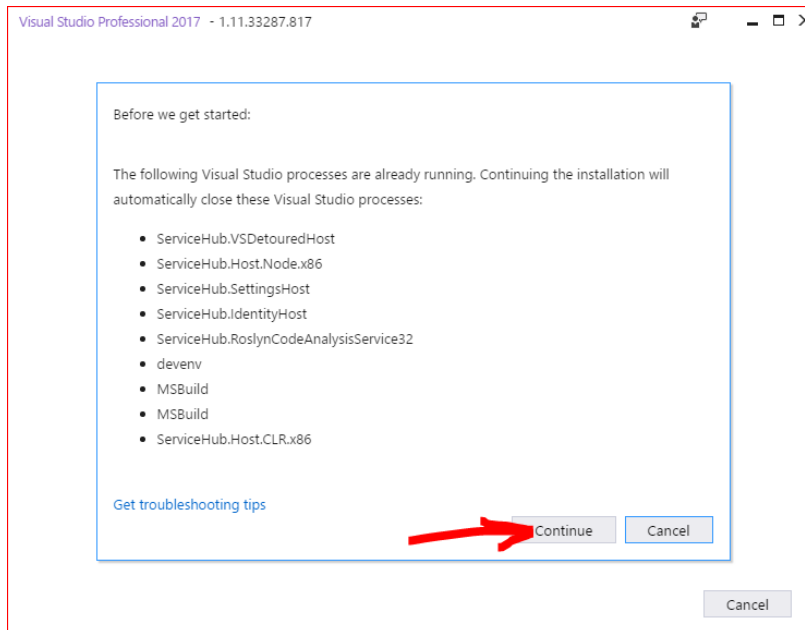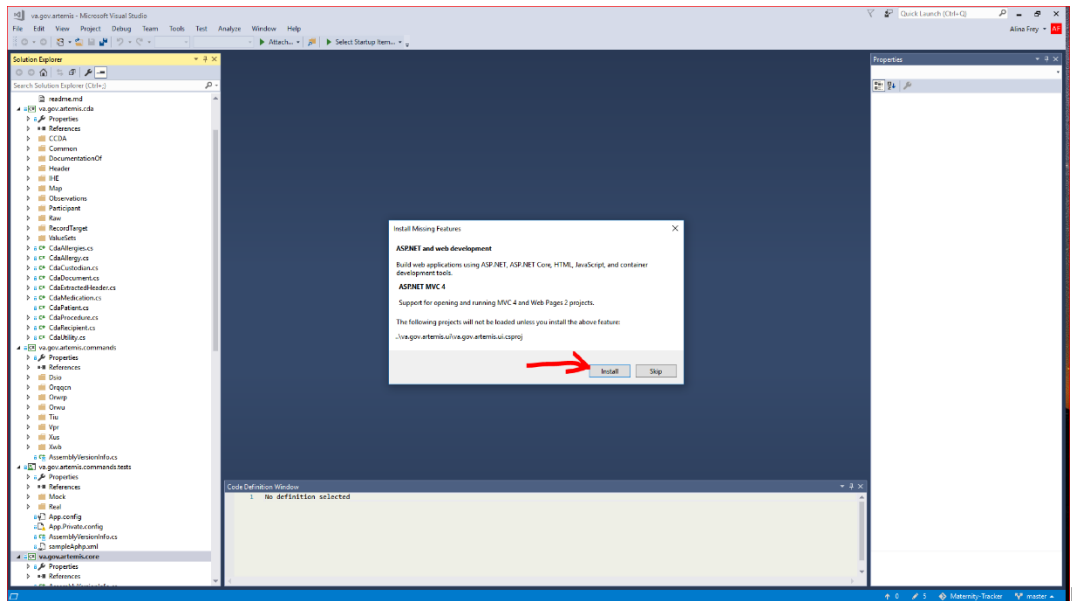
5. To install Git command prompt tools, click on the message at the top of the Team Explorer panel:
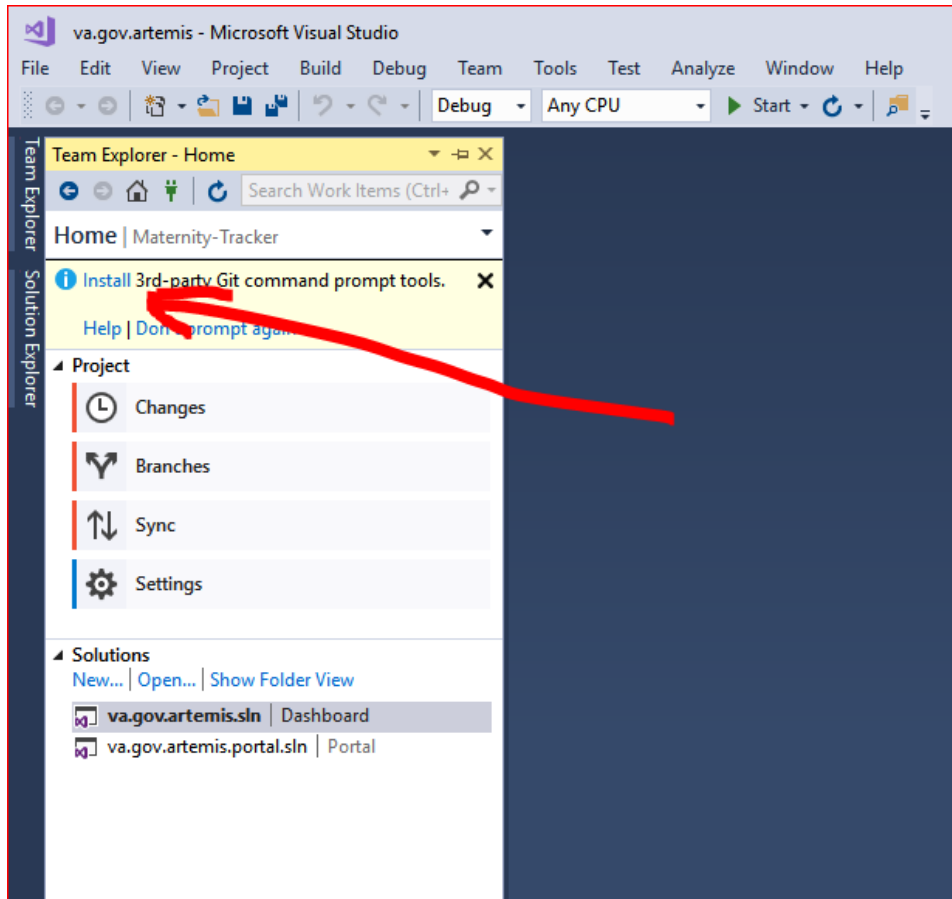
6. To switch to the Folder View, click on **Show Folder View** at the top of the Solutions section in the Team Explorer panel.

7. There are two solutions to the project, which can be seen from the Solution Explorer View (Folder View) or the Team Explorer View:
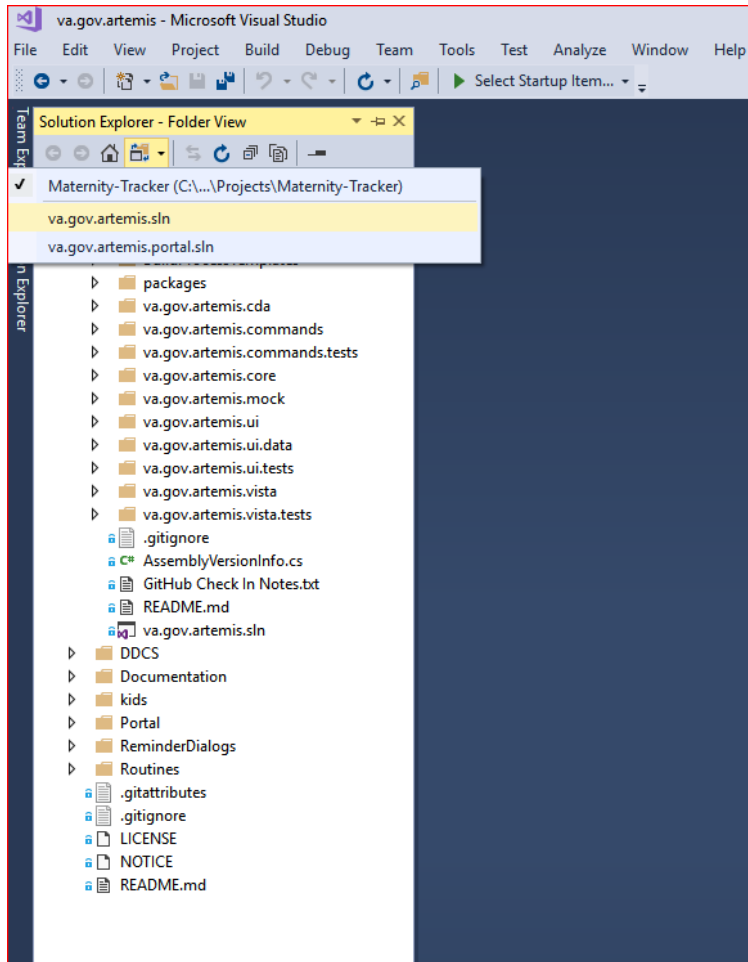
8. Restore NuGet packages before build:
    a. Right click on the solution **va.gov.artemis.sln** in the **Solution Explorer (Folder View)**
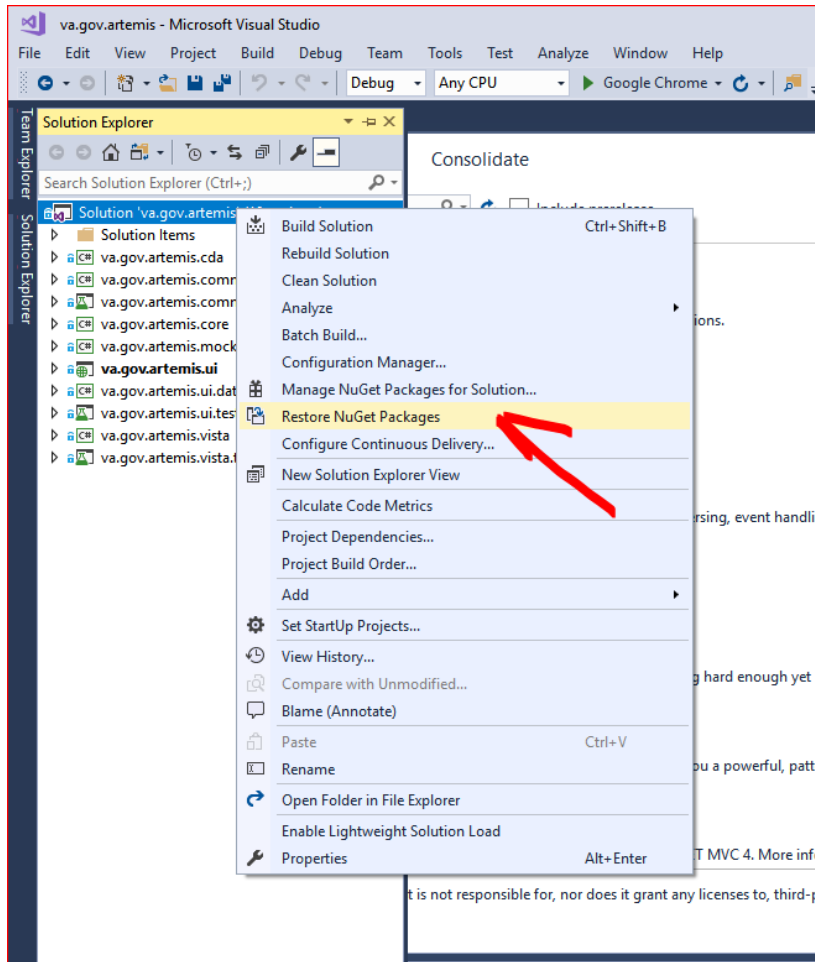
b.   The folder 'packages' should be added to the Dashboard folder of the project:
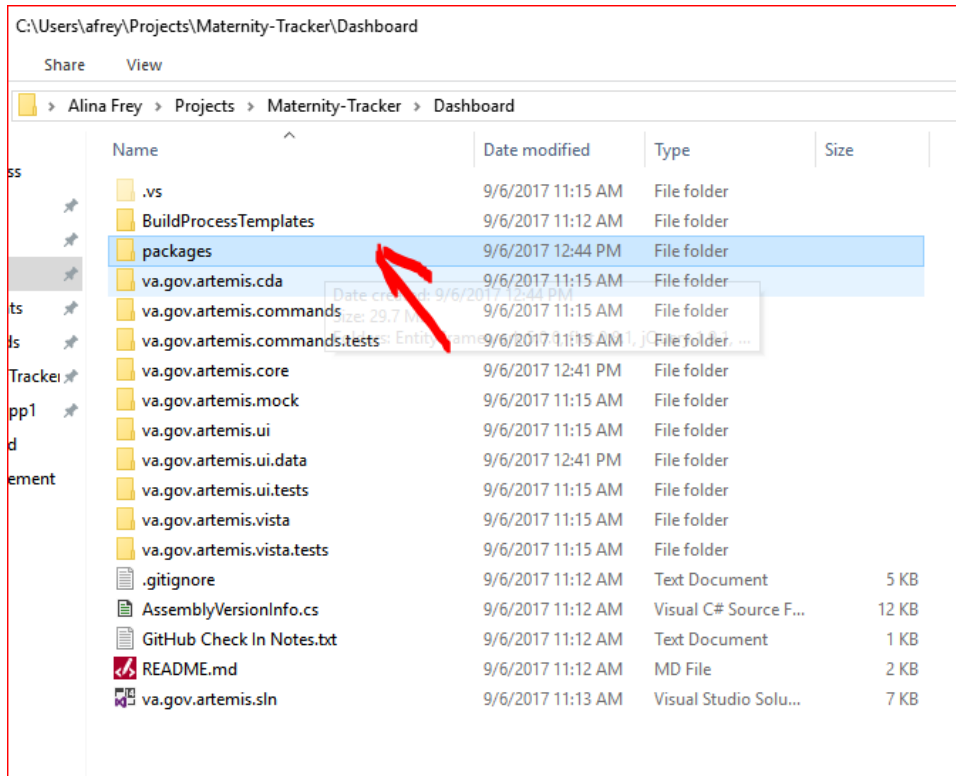
3.4   Building and Running the Maternity Tracker Project

1. Add the required resources:
    a. Expand the package **va.gov.artemis.ui**
    b. Right click on the References folder >> Add Reference
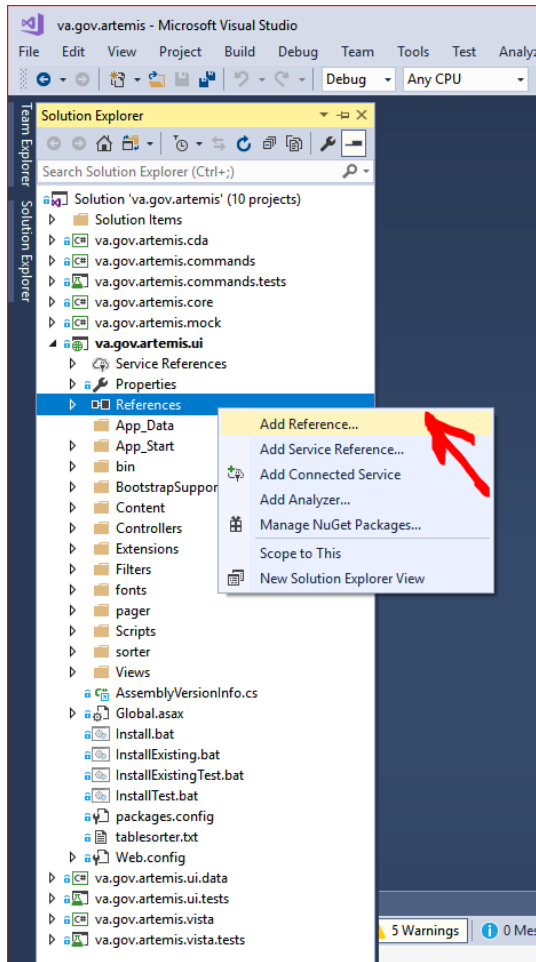
c. Browse to, and Add the following file, then click Ok:

C:\Users\<your-user-name>\Projects\Maternity-Tracker\Dashboard\packages\Microsoft.AspNet.Mvc.4.0.20710.0\lib\net40\System.Web.Mvc.dll
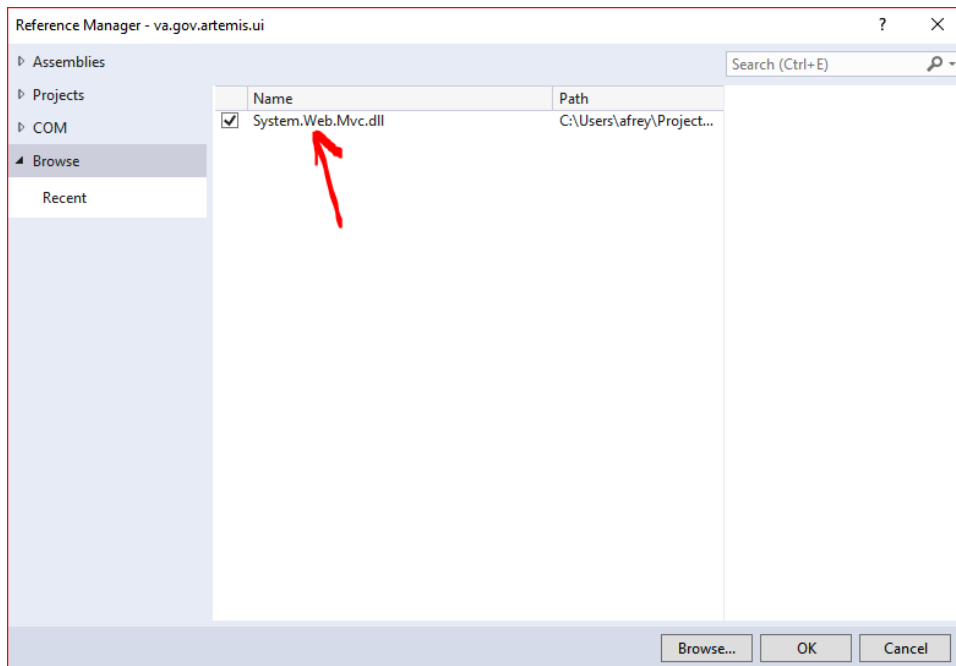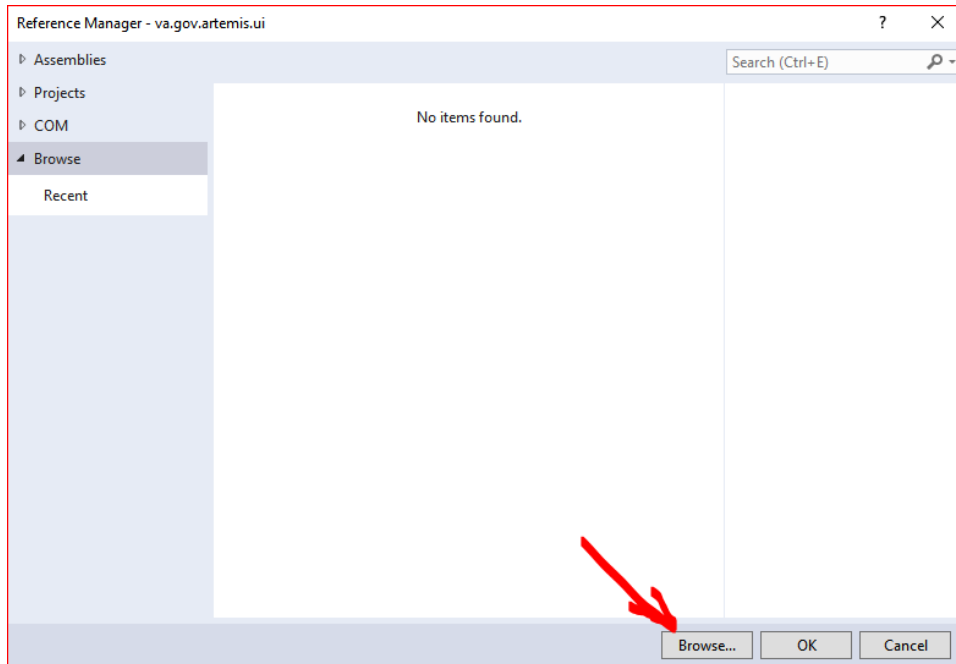
2. Build the project:
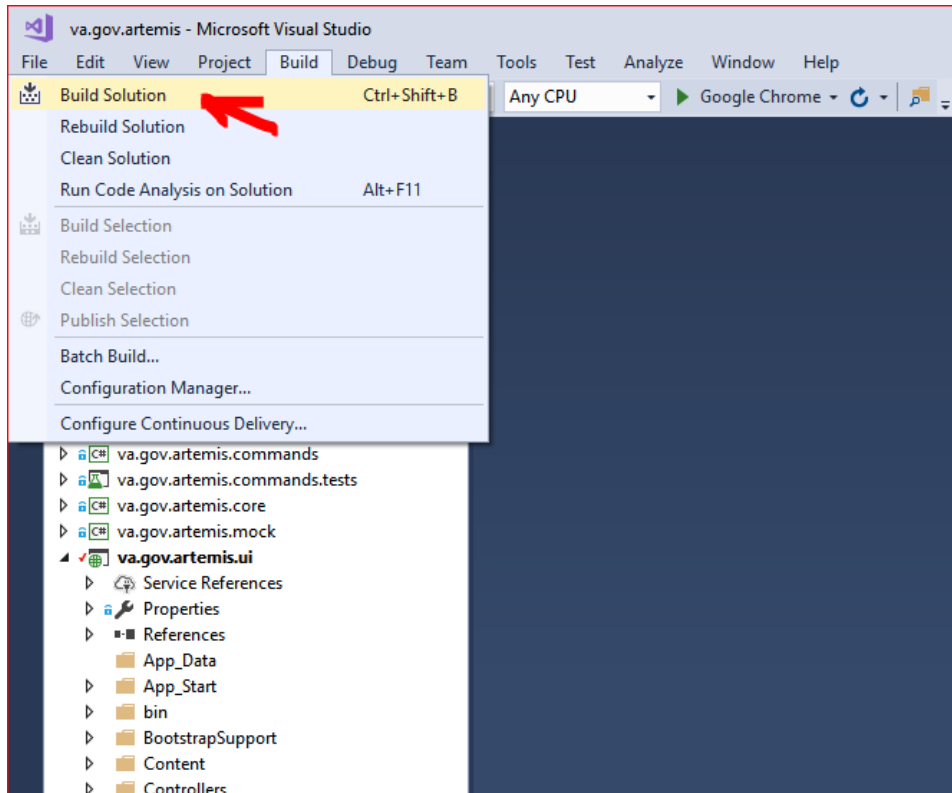
3. In the output panel you should see the build messages: errors or warnings
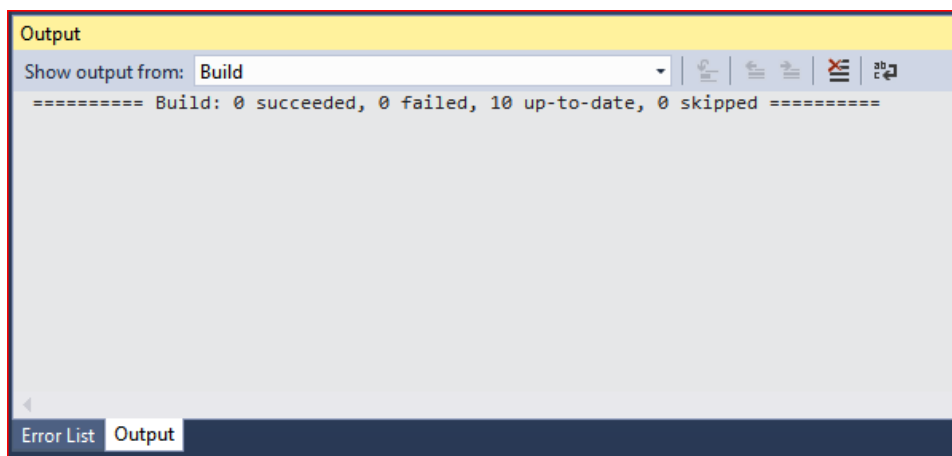
4. There are a couple of warnings that show up in the console. The one on top related to Newtonsoft.Json needs to be addressed. For now, just double click on the warning and accept by clicking **OK** button. That solves the problem temporarily.
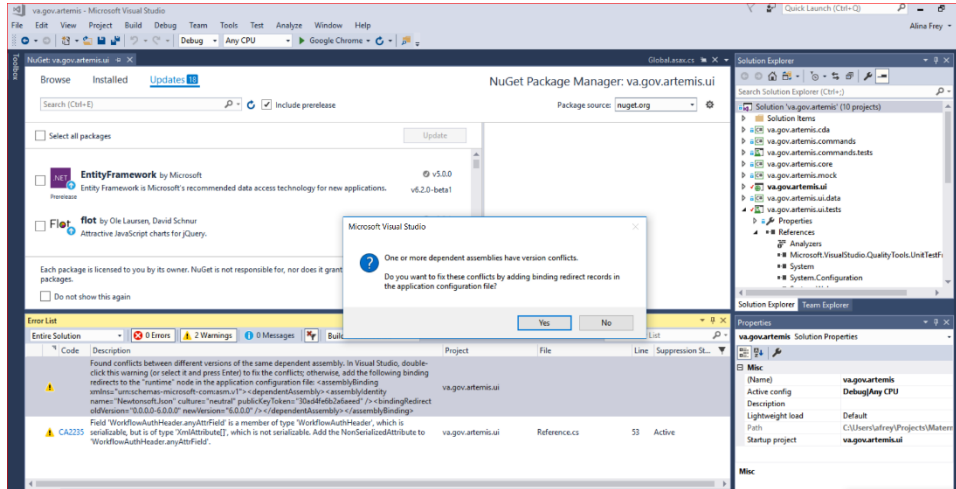
5. Run the Application.
   Note: This step is not necessary for publishing the build to the FTL site. But it is good for verification and testing on the local machine before deploying on the FTL site.
   a. Right click on the package **va.gov.artemis.ui >> Debug >> Start new Instance.**
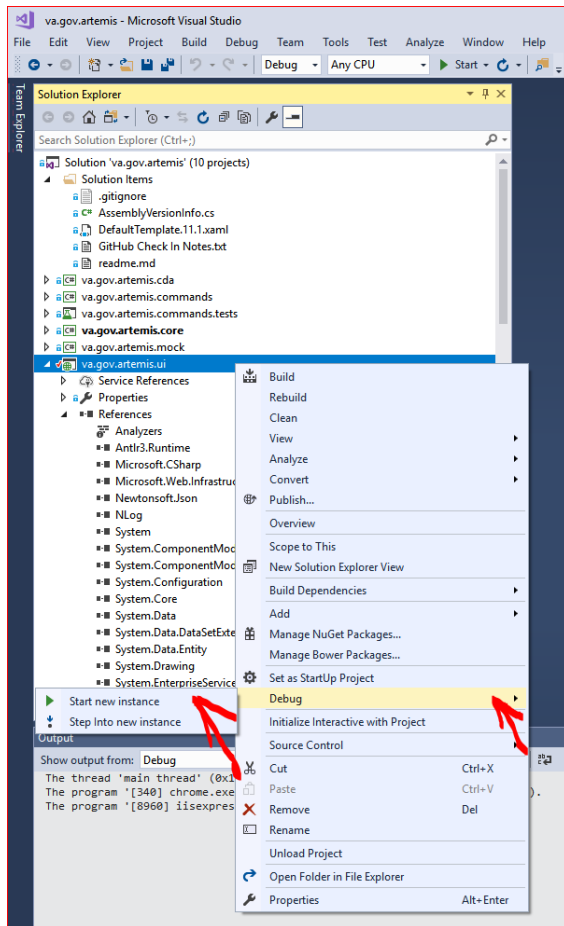
b. You will get a warning regarding the Self-Signed certificate. Select the checkbox for 'Do not ask me again', and the select **Ok**.
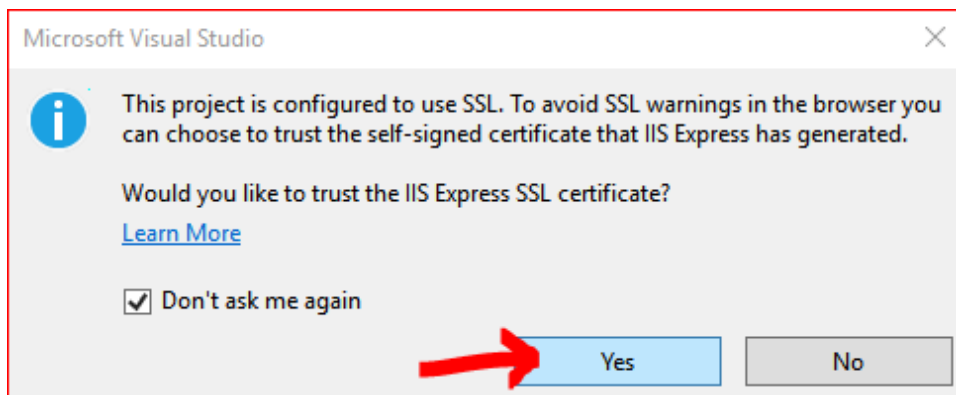
c.   Select **Yes** button at the next warning, to install the certificate:

Security Warning   ✕

⚠   You are about to install a certificate from a certification authority (CA)
     claiming to represent:

     localhost

     Windows cannot validate that the certificate is actually from
     "localhost". You should confirm its origin by contacting "localhost".
     The following number will assist you in this process:

     Thumbprint (sha1): C85C3075 3CF1E41F 021B76F7 C6BA0AA5 C6F9ED11

     Warning:
     If you install this root certificate, Windows will automatically trust any
     certificate issued by this CA. Installing a certificate with an unconfirmed
     thumbprint is a security risk. If you click "Yes" you acknowledge this
     risk.

     Do you want to install this certificate?

                                          [Yes   ]   [No   ]

d.   If your default web browser is Chrome, you may see this message:
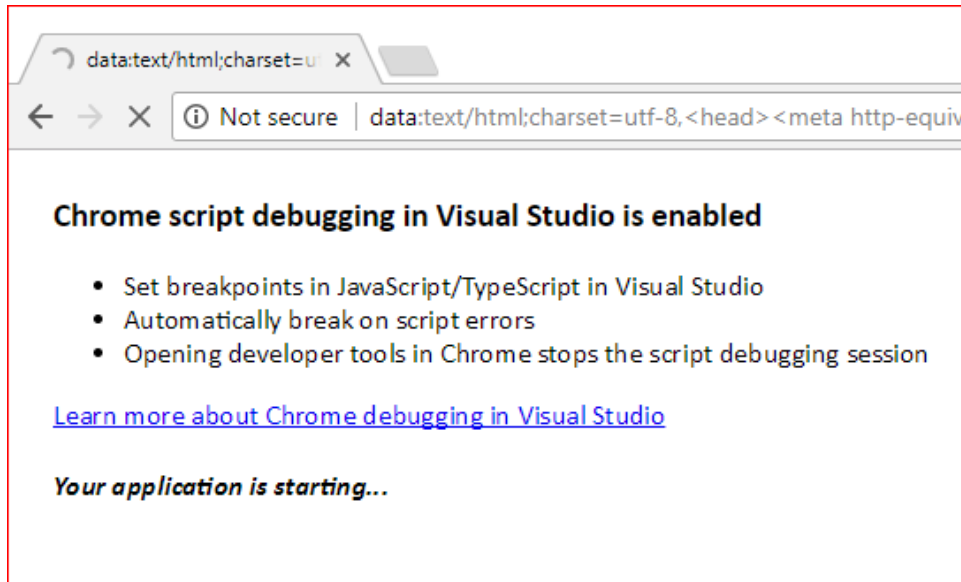
e. After everything loads, you should be able to see the Dashboard:
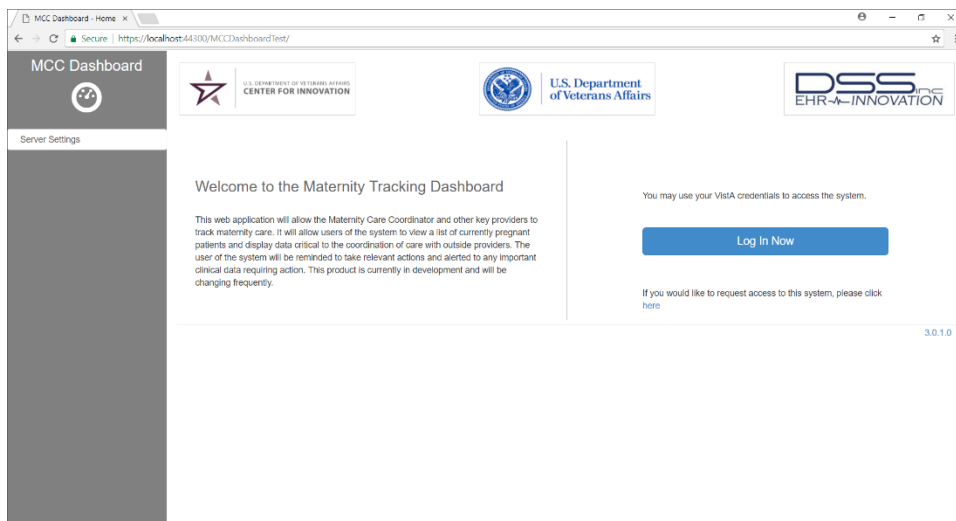
4   Installing Maternity Tracker packages into VistA

4.1   Copy Maternity Tracker kid files into VistA

1. Login to FTL machine using Putty:
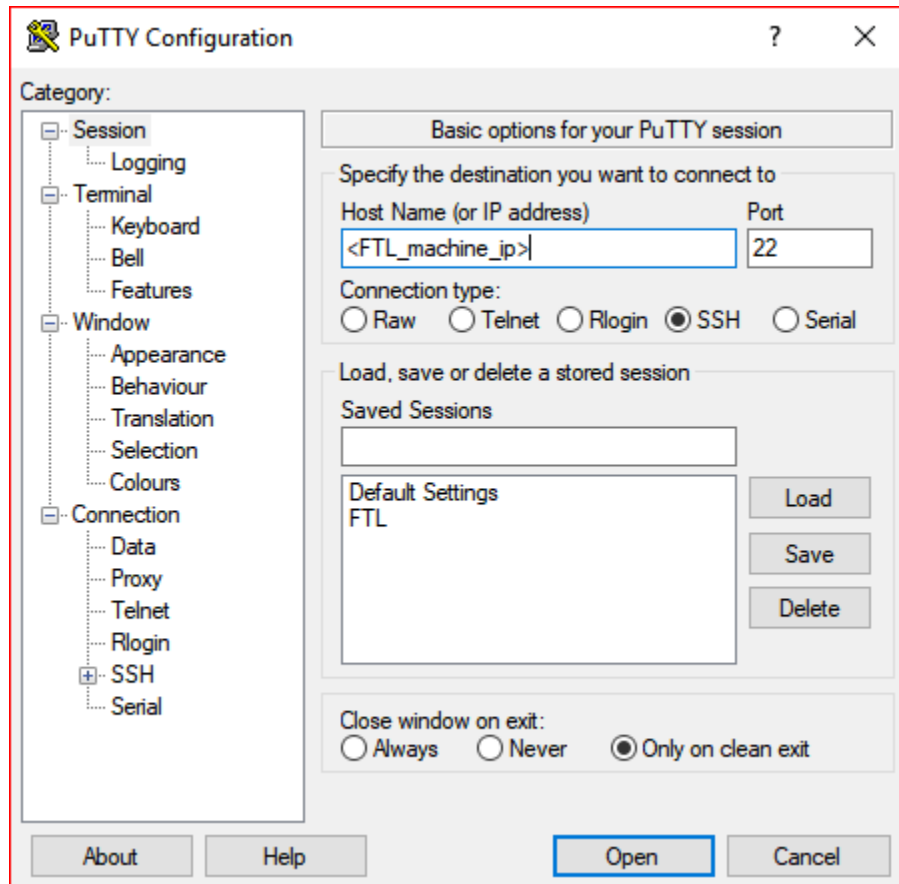
   a. This opens Putty command prompt.
   b. Enter `<FTL_username>` and `<FTL_password>`

2. On FTL machine, using the same Putty command window, create a new folder structure where the kid files (from your local machine) will be copied to:

```
$ cd ~
$ mkdir MTkids
$ cd MTkids
$ mkdir builds
$ mkdir TITLES
$ ls
builds   TITLES
```

NOTE: The **TITLES** folder needs to be under the same parent directory as the **builds** folder. This is necessary when loading and installing the kid files. The installation will not complete correctly if the TITLES are not under the same root directory.

3. Copy the **build** kid files from your local machine to the FTL machine using **Bash command**:

```
$ pscp <LOCAL_path_to_builds>/*
<FTL_username>@<FTL_machine_ip>:<FTL_path_to_builds>


<FTL_username>@<FTL_machine_ip>'s password: <FTL_password>

WEBM_1.KID                    | 670 kB | 670.8 kB/s | ETA: 00:00:00 | 100%
WEBM_2.KID                    | 984 kB | 984.2 kB/s | ETA: 00:00:00 | 100%
MATERNITY_TRACKER_3.KID   | 982 kB | 982.0 kB/s | ETA: 00:00:00 | 100%
```

4. Copy the **TITLES** kid files from your local machine to the FTL machine using **Bash command:**

```
$ pscp <LOCAL_path_to_TITLES>/*
<FTL_username>@<FTL_machine_ip>:<FTL_path_to_TITLES>


<FTL_username>@<FTL_machine_ip>'s password: <FTL_password>

WEBM_TIU_TITLE_01.TXT      | 1 kB |   1.4 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_02.TXT      | 1 kB |   1.4 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_03.TXT      | 1 kB |   1.4 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_04.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_05.TXT      | 1 kB |   1.4 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_06.TXT      | 1 kB |   1.4 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_07.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_08.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_09.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_10.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_11.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_12.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_13.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_14.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_15.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_16.TXT      | 1 kB |   1.5 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_17.TXT      | 1 kB |   1.6 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_18.TXT      | 1 kB |   1.6 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_19.TXT      | 1 kB |   1.6 kB/s | ETA: 00:00:00 | 100%
WEBM_TIU_TITLE_20.TXT      | 1 kB |   1.4 kB/s | ETA: 00:00:00 | 100%
```

4.2 Load Maternity Tracker kid files into VistA

1. Login to FTL machine using Putty again (same as step #1) and open a VistA Cache instance:

```
$ cd /
$ sudo csession cache -U GOLD
Node: ip-10-99-193-70.ec2.internal, Instance: CACHE
GOLD>
```

2. Load the kid files into this VistA instance. You will have to provide the path to the new location **<FTL_path_to_builds>/<filename>** for all 3 kids files: WEBM_1.KID, WEBM_2.KID, MATERNITY_TRACKER_3.KID. This step seems to fail if the path given to the file is too long. You may have to copy one or more files into a folder that has a shorter path, and provide that path to have it loaded.

```
VISTA>S DUZ=1
VISTA>D ^XUP

Setting up programmer environment
This is a TEST account.

Terminal Type set to: C-VT220

Select OPTION NAME: <KERNEL>
     1    KERNEL GUI ALERTS  XQAL GUI ALERTS     Kernel GUI Alerts
     2    KERNEL INSTALLATION & DISTRIBU  XPD MAIN     Kernel Installation &
Distribution System
     3    KERNEL MANAGEMENT MENU  XUKERNEL     Kernel Management Menu
     4    KERNEL NEW FEATURES HELP  XUVERSIONEW-HELP     Kernel New Features
Help
     5    KERNEL PKI PARAMETER EDIT  XUSSPKI EDIT     Kernel PKI Parameter
Edit
Press <Enter> to see more, '^' to exit this list,  OR
CHOOSE 1-5: <2>  XPD MAIN     Kernel Installation & Distribution System
          Edits and Distribution ...
          Utilities ...
          Installation ...
          Patch Monitor Main Menu ...

Select Kernel Installation & Distribution System <TEST ACCOUNT> Option:
<Installation>
    1       Load a Distribution
    2       Verify Checksums in Transport Global
    3       Print Transport Global
    4       Compare Transport Global to Current System
    5       Backup a Transport Global
    6       Install Package(s)
            Restart Install of Package(s)
            Unload a Distribution
```

3. Load **WEBM_1.KID**:

```
Select Installation <TEST ACCOUNT> Option: <1>  Load a Distribution
Enter a Host File: <FTL_path_to_builds>/WEBM_1.KID
KIDS Distribution saved on Apr 10, 2015@12:06:59
Comment: WEBM 1.0

This Distribution contains Transport Globals for the following Package(s):
   WEBM 1.0
Distribution OK!

Want to Continue with Load? YES// yes  YES
Loading Distribution...

   WEBM 1.0
Use INSTALL NAME: WEBM 1.0 to install this Distribution.

   1      Load a Distribution
   2      Verify Checksums in Transport Global
   3      Print Transport Global
   4      Compare Transport Global to Current System
   5      Backup a Transport Global
   6      Install Package(s)
          Restart Install of Package(s)
          Unload a Distribution
```

4. Load **WEBM_2.KID**:

```
Select Installation <TEST ACCOUNT> Option: 1  Load a Distribution
Enter a Host File: <FTL_path_to_builds>/WEBM_2.KID

KIDS Distribution saved on Sep 19, 2016@12:02:45
Comment: WEBM 2.0

This Distribution contains Transport Globals for the following Package(s):
   WEBM 2.0
Distribution OK!

Want to Continue with Load? YES// yes  YES
Loading Distribution...

   WEBM 2.0
Use INSTALL NAME: WEBM 2.0 to install this Distribution.

   1      Load a Distribution
   2      Verify Checksums in Transport Global
   3      Print Transport Global
   4      Compare Transport Global to Current System
   5      Backup a Transport Global
   6      Install Package(s)
          Restart Install of Package(s)
```

```
                        Unload a Distribution
```

5. Load **MATERNITY_TRACKER_3.KID**:

```
Select Installation <TEST ACCOUNT> Option: 1  Load a Distribution
Enter a Host File: <FTL_path_to_builds>/MATERNITY_TRACKER_3.KID
This Distribution contains Transport Globals for the following Package(s):
Build MATERNITY TRACKER 3.0 has been loaded before, here is when:
     MATERNITY TRACKER 3.0   Install Completed
                              was loaded on Sep 21, 2017@16:48:54
OK to continue with Load? NO// YES

Distribution OK!

Want to Continue with Load? YES// YES
Loading Distribution...

   MATERNITY TRACKER 3.0
Use INSTALL NAME: MATERNITY TRACKER 3.0 to install this Distribution.

   1        Load a Distribution
   2        Verify Checksums in Transport Global
   3        Print Transport Global
   4        Compare Transport Global to Current System
   5        Backup a Transport Global
   6        Install Package(s)
            Restart Install of Package(s)
            Unload a Distribution

Select Installation <TEST ACCOUNT> Option:
```

4.3 Install Maternity Tracker kid files into VistA

Continue from the above menu.

NOTE: The WEBM 2.0 and Maternity Tracker 3.0 installations will prompt you for the location of the Titles files found under `<FTL_path_to_TITLES>`, so the **TITLES** folder needs to be under the same parent directory as the **builds** folder.

1. Install **WEBM 1.0**:

```
Select Installation <TEST ACCOUNT> Option: install Package(s)
Select INSTALL NAME: d
   1   WEBM 1.0      Loaded from Distribution    9/25/17@15:25:25
   => WEBM 1.0  ;Created on Apr 10, 2015@12:06:59
   2   WEBM 2.0      Loaded from Distribution    9/25/17@15:27:47
   => WEBM 2.0  ;Created on Sep 19, 2016@12:02:45
CHOOSE 1-2: 1  WEBM 1.0     Loaded from Distribution    9/25/17@15:25:25
   => WEBM 1.0  ;Created on Apr 10, 2015@12:06:59
```

```
This Distribution was loaded on Sep 25, 2017@15:25:25 with header of
    WEBM 1.0  ;Created on Apr 10, 2015@12:06:59
    It consisted of the following Install(s):
        WEBM 1.0
Checking Install for Package WEBM 1.0

Install Questions for WEBM 1.0

Incoming Files:

    19641     WEBM PATIENT
Note:  You already have the 'WEBM PATIENT' File.

    19641.01  WEBM MENSTRUAL HISTORY
Note:  You already have the 'WEBM MENSTRUAL HISTORY' File.

    19641.03  WEBM EDD HISTORY
Note:  You already have the 'WEBM EDD HISTORY' File.

    19641.1   WEBM OUTSIDE ENTITIES
*BUT YOU ALREADY HAVE 'WEBM EXTERNAL ENTITIES' AS FILE #19641.1!
Shall I write over your WEBM EXTERNAL ENTITIES File? YES// y  YES

    19641.11  WEBM PERSON
Note:  You already have the 'WEBM PERSON' File.

    19641.112 WEBM FETUS/BABY
Note:  You already have the 'WEBM FETUS/BABY' File.

    19641.12  WEBM OBSERVATIONS
Note:  You already have the 'WEBM OBSERVATIONS' File.

    19641.122 WEBM OBSERVATION CATEGORY
*BUT YOU ALREADY HAVE 'WEBM DDCS OBSERVATION CONFIG' AS FILE #19641.122!
Shall I write over your WEBM DDCS OBSERVATION CONFIG File? YES// y  YES

    19641.123 WEBM OBSERVATION PUSH  (including data)
Note:  You already have the 'WEBM OBSERVATION PUSH' File.
I will REPLACE your data with mine.

    19641.124 WEBM PUSH HISTORY
*BUT YOU ALREADY HAVE 'WEBM DDCS PUSH HISTORY' AS FILE #19641.124!
Shall I write over your WEBM DDCS PUSH HISTORY File? YES// y  YES

    19641.13  WEBM PREGNANCY HISTORY
Note:  You already have the 'WEBM PREGNANCY HISTORY' File.

    19641.2   WEBM TRACKING HISTORY
Note:  You already have the 'WEBM TRACKING HISTORY' File.

    19641.22  WEBM TRACKING SOURCE  (including data)
Note:  You already have the 'WEBM TRACKING SOURCE' File.
I will MERGE your data with mine.
```

```
    19641.23  WEBM TRACKING REASON  (including data)
Note:  You already have the 'WEBM TRACKING REASON' File.
I will MERGE your data with mine.

    19641.31  WEBM TRIGGER PROBLEM  (including data)
Note:  You already have the 'WEBM TRIGGER PROBLEM' File.
I will REPLACE your data with mine.

    19641.33  WEBM TRIGGER LAB TEST  (including data)
*BUT YOU ALREADY HAVE 'WEBM TRIGGER LABS' AS FILE #19641.33!
Shall I write over your WEBM TRIGGER LABS File? YES// y  YES
I will REPLACE your data with mine.

    19641.35  WEBM TRIGGER CONSULT  (including data)
Note:  You already have the 'WEBM TRIGGER CONSULT' File.
I will REPLACE your data with mine.

    19641.4   WEBM NOTE CONTROL
*BUT YOU ALREADY HAVE 'WEBM DDCS CONTROL' AS FILE #19641.4!
Shall I write over your WEBM DDCS CONTROL File? YES// y  YES

    19641.401 WEBM REPORT ITEMS  (including data)
*BUT YOU ALREADY HAVE 'WEBM DDCS REPORT ITEMS' AS FILE #19641.401!
Shall I write over your WEBM DDCS REPORT ITEMS File? YES// y  YES
I will REPLACE your data with mine.

    19641.402 WEBM REMINDER ELEMENTS
Note:  You already have the 'WEBM REMINDER ELEMENTS' File.

    19641.41  WEBM NOTE DATA
*BUT YOU ALREADY HAVE 'WEBM DDCS DATA' AS FILE #19641.41!
Shall I write over your WEBM DDCS DATA File? YES// y  YES

    19641.45  WEBM NOTE ELEMENT
*BUT YOU ALREADY HAVE 'WEBM DDCS ELEMENT' AS FILE #19641.45!
Shall I write over your WEBM DDCS ELEMENT File? YES// y  YES

    19641.48  WEBM OCNT CONFIGURATION  (including data)
I will REPLACE your data with mine.

    19641.49  WEBM OCNT DIALOGS  (including data)
*BUT YOU ALREADY HAVE 'WEBM DDCS DIALOGS' AS FILE #19641.49!
Shall I write over your WEBM DDCS DIALOGS File? YES// y  YES
I will REPLACE your data with mine.

    19641.492 WEBM OCNT ACTION  (including data)
*BUT YOU ALREADY HAVE 'WEBM DDCS PARAMETER' AS FILE #19641.492!
Shall I write over your WEBM DDCS PARAMETER File? YES// y  YES
I will REPLACE your data with mine.

    19641.4941WEBM OCNT SHARED DATA
*BUT YOU ALREADY HAVE 'WEBM DDCS SHARED DATA' AS FILE #19641.4941!
```

```
Shall I write over your WEBM DDCS SHARED DATA File? YES// y  YES

   19641.5   WEBM TITLE CONFIGURATION
Note:  You already have the 'WEBM TITLE CONFIGURATION' File.

   19641.6   WEBM IHE DOCUMENT
Note:  You already have the 'WEBM IHE DOCUMENT' File.

   19641.61  WEBM IHE DOCUMENT TYPE   (including data)
Note:  You already have the 'WEBM IHE DOCUMENT TYPE' File.
I will REPLACE your data with mine.

   19641.7   WEBM MCC CHECKLIST
Note:  You already have the 'WEBM MCC CHECKLIST' File.

   19641.71  WEBM MCC CHECKLIST TYPE   (including data)
Note:  You already have the 'WEBM MCC CHECKLIST TYPE' File.
I will REPLACE your data with mine.

   19641.72  WEBM MCC CHECKLIST DCT   (including data)
Note:  You already have the 'WEBM MCC CHECKLIST DCT' File.
I will MERGE your data with mine.

   19641.73  WEBM MCC CHECKLIST CAT   (including data)
Note:  You already have the 'WEBM MCC CHECKLIST CAT' File.
I will MERGE your data with mine.

   19641.74  WEBM MCC CHECKLIST COMSTAT   (including data)
Note:  You already have the 'WEBM MCC CHECKLIST COMSTAT' File.
I will MERGE your data with mine.

   19641.76  WEBM MCC PATIENT CHECKLIST
Note:  You already have the 'WEBM MCC PATIENT CHECKLIST' File.

   19641.8   WEBM EDUCATION
Note:  You already have the 'WEBM EDUCATION' File.

   19641.81  WEBM PATIENT EDUCATION
Note:  You already have the 'WEBM PATIENT EDUCATION' File.

   19641.83  WEBM PREG TIU LINK
*BUT YOU ALREADY HAVE 'WEBM PREGNANCY-NOTE' AS FILE #19641.83!
Shall I write over your WEBM PREGNANCY-NOTE File? YES// y  YES

   19641.99  WEBM CODES
Note:  You already have the 'WEBM CODES' File.

Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES// y  YES

Want KIDS to INHIBIT LOGONs during the install? YES// y  YES
Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//

Enter the Device you want to print the Install messages.
```

You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: HOME// **home** TERMINAL

                            Rebuilding Menus
qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
qqq

Starting Menu Rebuild: Sep 25, 2017@16:22:06

Collecting primary menus in the New Person file...

                    Primary menus found in the New Person file
                    ----

OPTION NAME   MENU TEXT   # OF   LAST   LAST
                                                   USERS   USED   BUILT

EVE   Systems Manager Menu   2   09/25/17
09/25/17

Building secondary menu trees....

Merging.... done.

Menu Rebuild Complete: Sep 25, 2017@16:22:10
qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
qqq
            lqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqk
  100%   x   25   50   75   x
Complete mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqj

Install Completed
    1   Load a Distribution
    2   Verify Checksums in Transport Global
    3   Print Transport Global
    4   Compare Transport Global to Current System
    5   Backup a Transport Global
    6   Install Package(s)
           Restart Install of Package(s)
           Unload a Distribution

   2. Install **WEBM 2.0**:

Select Installation <TEST ACCOUNT> Option: **install** Package(s)
Select INSTALL NAME: **WEBM 2.0**   Loaded from Distribution
9/21/17@16:45:44
     => WEBM 2.0 ;Created on Sep 19, 2016@12:02:45

This Distribution was loaded on Sep 21, 2017@16:45:44 with header of

```
   WEBM 2.0  ;Created on Sep 19, 2016@12:02:45
   It consisted of the following Install(s):
      WEBM 2.0
Checking Install for Package WEBM 2.0

Install Questions for WEBM 2.0

Incoming Files:

   19641    WEBM PATIENT
Note:  You already have the 'WEBM PATIENT' File.

   19641.01  WEBM MENSTRUAL HISTORY
Note:  You already have the 'WEBM MENSTRUAL HISTORY' File.

   19641.03  WEBM EDD HISTORY
Note:  You already have the 'WEBM EDD HISTORY' File.

   19641.1   WEBM EXTERNAL ENTITIES
Note:  You already have the 'WEBM EXTERNAL ENTITIES' File.

   19641.11  WEBM PERSON
Note:  You already have the 'WEBM PERSON' File.

   19641.112 WEBM FETUS/BABY
Note:  You already have the 'WEBM FETUS/BABY' File.

   19641.12  WEBM OBSERVATIONS
Note:  You already have the 'WEBM OBSERVATIONS' File.

   19641.122 WEBM DDCS OBSERVATION CONFIG  (including data)
Note:  You already have the 'WEBM DDCS OBSERVATION CONFIG' File.
I will REPLACE your data with mine.

   19641.123 WEBM OBSERVATION PUSH  (including data)
Note:  You already have the 'WEBM OBSERVATION PUSH' File.
I will REPLACE your data with mine.

   19641.124 WEBM DDCS PUSH HISTORY
Note:  You already have the 'WEBM DDCS PUSH HISTORY' File.

   19641.13  WEBM PREGNANCY HISTORY
Note:  You already have the 'WEBM PREGNANCY HISTORY' File.

   19641.2   WEBM TRACKING HISTORY
Note:  You already have the 'WEBM TRACKING HISTORY' File.

   19641.22  WEBM TRACKING SOURCE
Note:  You already have the 'WEBM TRACKING SOURCE' File.


   19641.23  WEBM TRACKING REASON  (including data)
Note:  You already have the 'WEBM TRACKING REASON' File.
```

```
I will OVERWRITE your data with mine.

    19641.31  WEBM TRIGGER PROBLEMS
Note:  You already have the 'WEBM TRIGGER PROBLEMS' File.

    19641.33  WEBM TRIGGER LABS
Note:  You already have the 'WEBM TRIGGER LABS' File.

    19641.35  WEBM TRIGGER CONSULTS
Note:  You already have the 'WEBM TRIGGER CONSULTS' File.

    19641.4   WEBM DDCS CONTROL   (including data)
Note:  You already have the 'WEBM DDCS CONTROL' File.
I will REPLACE your data with mine.

    19641.401 WEBM DDCS REPORT ITEMS  (including data)
Note:  You already have the 'WEBM DDCS REPORT ITEMS' File.
I will REPLACE your data with mine.

    19641.41  WEBM DDCS DATA
Note:  You already have the 'WEBM DDCS DATA' File.

    19641.42  WEBM DDCS FORM CONFIGURATION  (including data)
Note:  You already have the 'WEBM DDCS FORM CONFIGURATION' File.
I will REPLACE your data with mine.

    19641.425 WEBM DDCS CONTROLS  (including data)
Note:  You already have the 'WEBM DDCS CONTROLS' File.
I will REPLACE your data with mine.

    19641.4258WEBM DDCS CONTROL PROPERTIES  (including data)
Note:  You already have the 'WEBM DDCS CONTROL PROPERTIES' File.
I will REPLACE your data with mine.

    19641.45  WEBM DDCS ELEMENT
Note:  You already have the 'WEBM DDCS ELEMENT' File.

    19641.49  WEBM DDCS DIALOGS  (including data)
Note:  You already have the 'WEBM DDCS DIALOGS' File.
I will REPLACE your data with mine.

    19641.492 WEBM DDCS PARAMETER  (including data)
Note:  You already have the 'WEBM DDCS PARAMETER' File.
I will REPLACE your data with mine.

    19641.493 WEBM DDCS VITALS CONTRACEPTION  (including data)
Note:  You already have the 'WEBM DDCS VITALS CONTRACEPTION' File.
I will OVERWRITE your data with mine.

    19641.4941WEBM DDCS SHARED DATA
Note:  You already have the 'WEBM DDCS SHARED DATA' File.

    19641.5   WEBM TITLE CONFIGURATION
```

Note: You already have the 'WEBM TITLE CONFIGURATION' File.

    19641.6   WEBM IHE DOCUMENT
Note: You already have the 'WEBM IHE DOCUMENT' File.

    19641.61 WEBM IHE DOCUMENT TYPE   (including data)
Note: You already have the 'WEBM IHE DOCUMENT TYPE' File.
I will OVERWRITE your data with mine.

    19641.7   WEBM MCC CHECKLIST
Note: You already have the 'WEBM MCC CHECKLIST' File.

    19641.71 WEBM MCC CHECKLIST TYPE   (including data)
Note: You already have the 'WEBM MCC CHECKLIST TYPE' File.
I will OVERWRITE your data with mine.

    19641.72 WEBM MCC CHECKLIST DCT   (including data)
Note: You already have the 'WEBM MCC CHECKLIST DCT' File.
I will OVERWRITE your data with mine.

    19641.73 WEBM MCC CHECKLIST CAT   (including data)
Note: You already have the 'WEBM MCC CHECKLIST CAT' File.
I will OVERWRITE your data with mine.

    19641.74 WEBM MCC CHECKLIST COMSTAT   (including data)
Note: You already have the 'WEBM MCC CHECKLIST COMSTAT' File.
I will OVERWRITE your data with mine.

    19641.76 WEBM MCC PATIENT CHECKLIST
Note: You already have the 'WEBM MCC PATIENT CHECKLIST' File.

    19641.8   WEBM EDUCATION
Note: You already have the 'WEBM EDUCATION' File.

    19641.81 WEBM PATIENT EDUCATION
Note: You already have the 'WEBM PATIENT EDUCATION' File.

    19641.83 WEBM PREGNANCY-NOTE
Note: You already have the 'WEBM PREGNANCY-NOTE' File.

    19641.99 WEBM CODES
Note: You already have the 'WEBM CODES' File.

Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO// **yes** YES

Want KIDS to INHIBIT LOGONs during the install? NO//
Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//

Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: **HOME**//   TERMINAL

```
                         WEBM 2.0
                     Rebuilding Menus

Starting Menu Rebuild:  Sep 21, 2017@16:46:53

Collecting primary menus in the New Person file...

              Primary menus found in the New Person file
              -------------------------------------------

OPTION NAME          MENU TEXT                   # OF        LAST      LAST
                                                 USERS       USED      BUILT

EVE                  Systems Manager Menu        2           09/18/17
09/21/17

Building secondary menu trees....

Merging.... done.

Menu Rebuild Complete:  Sep 21, 2017@16:46:57
```
<Note: Here you will be asked for the path to the titles folder
<FTL_path_to_TITLES>>
```
qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
qqq
          lqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqk
   100%    x              25             50             75                 x
      25             50             75          qqqqqqqqqqqqqqqqqqqj


Install Completed

    1      Load a Distribution
    2      Verify Checksums in Transport Global
    3      Print Transport Global
    4      Compare Transport Global to Current System
    5      Backup a Transport Global
    6      Install Package(s)
           Restart Install of Package(s)
           Unload a Distribution
```

3. Install **MATERNITY TRACKER 3.0**:

```
Select Installation <TEST ACCOUNT> Option: 6  Install Package(s)
Select INSTALL NAME: MATERNITY TRACKER 3.0      Loaded from Distribution
9/2
1/17@16:48:15
    => MATERNITY TRACKER 3.0  ;Created on Apr 27, 2017@21:16:26

This Distribution was loaded on Sep 21, 2017@16:48:15 with header of
   MATERNITY TRACKER 3.0  ;Created on Apr 27, 2017@21:16:26
```

```
     It consisted of the following Install(s):
MATERNITY TRACKER 3.0
Checking Install for Package MATERNITY TRACKER 3.0

Install Questions for MATERNITY TRACKER 3.0

Incoming Files:

   19641     WEBM PATIENT
Note:  You already have the 'WEBM PATIENT' File.

   19641.01  WEBM MENSTRUAL HISTORY
Note:  You already have the 'WEBM MENSTRUAL HISTORY' File.

   19641.03  WEBM EDD HISTORY
Note:  You already have the 'WEBM EDD HISTORY' File.

   19641.1   WEBM EXTERNAL ENTITIES
Note:  You already have the 'WEBM EXTERNAL ENTITIES' File.

   19641.11  WEBM PERSON
Note:  You already have the 'WEBM PERSON' File.

   19641.112 WEBM FETUS/BABY
Note:  You already have the 'WEBM FETUS/BABY' File.

   19641.12  WEBM OBSERVATIONS
Note:  You already have the 'WEBM OBSERVATIONS' File.

   19641.122 WEBM DDCS OBSERVATION CONFIG  (including data)
Note:  You already have the 'WEBM DDCS OBSERVATION CONFIG' File.
I will REPLACE your data with mine.

   19641.123 WEBM OBSERVATION PUSH  (including data)
Note:  You already have the 'WEBM OBSERVATION PUSH' File.
I will REPLACE your data with mine.

   19641.124 WEBM DDCS PUSH HISTORY
Note:  You already have the 'WEBM DDCS PUSH HISTORY' File.

   19641.13  WEBM PREGNANCY HISTORY
Note:  You already have the 'WEBM PREGNANCY HISTORY' File.

   19641.2   WEBM TRACKING HISTORY
Note:  You already have the 'WEBM TRACKING HISTORY' File.

   19641.22  WEBM TRACKING SOURCE
Note:  You already have the 'WEBM TRACKING SOURCE' File.

   19641.23  WEBM TRACKING REASON  (including data)
Note:  You already have the 'WEBM TRACKING REASON' File.
I will OVERWRITE your data with mine.
```

```
   19641.31  WEBM TRIGGER PROBLEMS
Note:  You already have the 'WEBM TRIGGER PROBLEMS' File.


   19641.33  WEBM TRIGGER LABS
Note:  You already have the 'WEBM TRIGGER LABS' File.


   19641.35  WEBM TRIGGER CONSULTS
Note:  You already have the 'WEBM TRIGGER CONSULTS' File.


   19641.4   WEBM DDCS CONTROL   (including data)
Note:  You already have the 'WEBM DDCS CONTROL' File.
I will REPLACE your data with mine.


   19641.401 WEBM DDCS REPORT ITEMS  (including data)
Note:  You already have the 'WEBM DDCS REPORT ITEMS' File.
I will REPLACE your data with mine.


   19641.41  WEBM DDCS DATA
Note:  You already have the 'WEBM DDCS DATA' File.


   19641.42  WEBM DDCS FORM CONFIGURATION  (including data)
Note:  You already have the 'WEBM DDCS FORM CONFIGURATION' File.
I will REPLACE your data with mine.


   19641.425 WEBM DDCS CONTROLS  (including data)
Note:  You already have the 'WEBM DDCS CONTROLS' File.
I will REPLACE your data with mine.


   19641.4258WEBM DDCS CONTROL PROPERTIES  (including data)
Note:  You already have the 'WEBM DDCS CONTROL PROPERTIES' File.
I will REPLACE your data with mine.


   19641.45  WEBM DDCS ELEMENT
Note:  You already have the 'WEBM DDCS ELEMENT' File.


   19641.49  WEBM DDCS DIALOGS  (including data)
Note:  You already have the 'WEBM DDCS DIALOGS' File.
I will REPLACE your data with mine.


   19641.492 WEBM DDCS PARAMETER  (including data)
Note:  You already have the 'WEBM DDCS PARAMETER' File.
I will REPLACE your data with mine.


   19641.493 WEBM DDCS VITALS CONTRACEPTION  (including data)
Note:  You already have the 'WEBM DDCS VITALS CONTRACEPTION' File.
I will OVERWRITE your data with mine.


   19641.4941WEBM DDCS SHARED DATA
Note:  You already have the 'WEBM DDCS SHARED DATA' File.


   19641.5   WEBM TITLE CONFIGURATION
Note:  You already have the 'WEBM TITLE CONFIGURATION' File.
```

```
   19641.6   WEBM IHE DOCUMENT
Note:  You already have the 'WEBM IHE DOCUMENT' File.

   19641.61  WEBM IHE DOCUMENT TYPE   (including data)
Note:  You already have the 'WEBM IHE DOCUMENT TYPE' File.
I will OVERWRITE your data with mine.

   19641.7   WEBM MCC CHECKLIST
Note:  You already have the 'WEBM MCC CHECKLIST' File.

   19641.71  WEBM MCC CHECKLIST TYPE   (including data)
Note:  You already have the 'WEBM MCC CHECKLIST TYPE' File.
I will OVERWRITE your data with mine.

   19641.72  WEBM MCC CHECKLIST DCT   (including data)
Note:  You already have the 'WEBM MCC CHECKLIST DCT' File.
I will OVERWRITE your data with mine.

   19641.73  WEBM MCC CHECKLIST CAT   (including data)
Note:  You already have the 'WEBM MCC CHECKLIST CAT' File.
I will OVERWRITE your data with mine.

   19641.74  WEBM MCC CHECKLIST COMSTAT   (including data)
Note:  You already have the 'WEBM MCC CHECKLIST COMSTAT' File.
I will OVERWRITE your data with mine.

   19641.76  WEBM MCC PATIENT CHECKLIST
Note:  You already have the 'WEBM MCC PATIENT CHECKLIST' File.

   19641.8   WEBM EDUCATION
Note:  You already have the 'WEBM EDUCATION' File.

   19641.81  WEBM PATIENT EDUCATION
Note:  You already have the 'WEBM PATIENT EDUCATION' File.

   19641.83  WEBM PREGNANCY-NOTE
Note:  You already have the 'WEBM PREGNANCY-NOTE' File.

   19641.99  WEBM CODES
Note:  You already have the 'WEBM CODES' File.

Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO// y  YES


Want KIDS to INHIBIT LOGONs during the install? NO//
Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//

Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: HOME//   TERMINAL
```

```
                          Rebuilding Menus
qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
qqq

Starting Menu Rebuild:  Sep 21, 2017@16:49:19

Collecting primary menus in the New Person file...

                  Primary menus found in the New Person file
                  ------------------------------------------

OPTION NAME           MENU TEXT                    # OF        LAST      LAST
                                                   USERS       USED      BUILT

EVE                   Systems Manager Menu         2           09/18/17
09/21/17

Building secondary menu trees....

Merging.... done.

Menu Rebuild Complete:  Sep 21, 2017@16:49:23
```
<Note: Here you will be asked for the path to the titles folder
<FTL_path_to_TITLES>>
```
qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
qqq
             lqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqk
   100%      x            25             50            75                 x
Complete    mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqj

Install Completed

    1      Load a Distribution
    2      Verify Checksums in Transport Global
    3      Print Transport Global
    4      Compare Transport Global to Current System
    5      Backup a Transport Global
    6      Install Package(s)
           Restart Install of Package(s)
           Unload a Distribution

Select Installation <TEST ACCOUNT> Option:^
```

5   Verification that the TIU Document Titles Were Extracted

```
VAH>D ^XUP
Select OPTION NAME: TIU IRM
TIU IRM MAINTENANCE MENU      TIU Maintenance Menu
TIU IRM TEMPLATE MGMT      TIU Template Mgmt FunctionsCHOOSE 1-2: 1  TIU IRM
MAINTENANCE MENU     TIU Maintenance Menu
TIU Parameters Menu ...
Document Definitions (Manager) ...
User Class Management ...
TIU Template Mgmt Functions ...
You have PENDING ALERTS
        Enter  "VA to jump to VIEW ALERTS option
Select TIU Maintenance Menu Option: 2  Document Definitions (Manager)
                  --- Manager Document Definition Menu --   1     Edit
Document Definitions   2     Sort Document Definitions
    3      Create Document Definitions
You have PENDING ALERTS
        Enter  "VA to jump to VIEW ALERTS option
Select Document Definitions (Manager) Option: 1  Edit Document
Definitions.......
Edit Document Definitions    Jan 15, 2015@12:02:58        Page:   1 of
1
                          BASICS


     Name
Type
1     CLINICAL DOCUMENTS                         CL 2      +PROGRESS
NOTES                                 CL
+ADDENDUM                                    DC
+DISCHARGE SUMMARY                    CL5     +SURGICAL REPORTS
CL
+LR LABORATORY REPORTS                CL
+CLINICAL PROCEDURES                     CL
?Help  >ScrollRight  PS/PL PrintScrn/List  +/-                >>>
    Jump to Document Def     Status...             Delete
    Boilerplate Text        Name/Owner/PrintName...  Copy/Move
Select Action: Quit// EX   Expand/Collapse
Select Entry: (1-7): 2
Edit Document Definitions    Jan 15, 2015@12:03:21        Page:   4 of
4
                          BASICS
 +     NameType
…
+C&P EXAMINATION REPORTSDC
+SCI OUTCOMESDC
+MEDICINEDC
+CARE COORDINATION HOME TELEHEALTH NOTESDC
+FORM LETTERSDC
```

```
+SECURE MESSAGING DOCUMENTSDC
```
+MATERNITY TRACKER DC
```
+PROVIDERDC
+TBI/POLYTRAUMA DOCUMENTSDC
+ADDENDUMDC
+DISCHARGE SUMMARYCL
+SURGICAL REPORTSCL
+LR LABORATORY REPORTSCL57     +CLINICAL PROCEDURESCL
```
Note: MATERNITY TRACKER can be expanded to view the notes.

6   Schedule the Task to PUSH Discreet Data

```
VAH>D ^XUP
Press <Enter>
Select OPTION NAME: EVE
EVE        Systems Manager Menu
EVENT CAPTURE  ECX ECS MAINTENANCE     Event Capture
…
CHOOSE 1-5: 1  EVE      Systems Manager Menu
          Core Applications ...
          Device Management ...
   FM     VA FileMan ...
          Menu Management ...
          Programmer Options ...
          Operations Management ...
          Spool Management ...
          Information Security Officer Menu ...
          Taskman Management ...
          User Management ...
          Application Utilities ...
          Capacity Planning ...
          HL7 Main Menu ...
          Manage Mailman ...
Select Systems Manager Menu Option: Taskman Management
           Schedule/Unschedule Options
          One-time Option Queue
          Taskman Management Utilities ...
          List Tasks
          Dequeue Tasks          Require Tasks
          Delete Tasks
          Print Options that are Scheduled to run       Cleanup Task List
          Print Options Recommended for Queueing
 Select Taskman Management Option: Schedule/Unschedule Options
 Select OPTION to schedule or reschedule: WEBM DDCS CHECK STATUS       Act on
TIU  note status
   Are you adding 'WEBM DDCS CHECK STATUS' as
    a new OPTION SCHEDULING (the 144TH)? No// YES  (Yes)
                      Edit Option Schedule
    Option Name: WEBM DDCS CHECK STATUS
    Menu Text: Act on TIU note status                  TASK ID:
  _____

Note: Schedule a start date/time.
QUEUED TO RUN AT WHAT TIME: OCT 22,2015@22:00 DEVICE FOR QUEUED JOB OUTPUT:
QUEUED TO RUN ON VOLUME SET:
Note: Schedule a duration or frequency.
RESCHEDULING FREQUENCY: 1D TASK PARAMETERS:
Note: Schedule the type of queuing.
 SPECIAL QUEUEING: Persistent
```

_____

Exit   Save   Next Page   Refresh

7   Set Trigger Parameters

For each of the follow three items, set the parameter to **YES** to flag patients for tracking:

- WEBM EVAL CONSULTS NOW
- WEBM EVAL LABS NOW
- WEBM EVAL PROBLEMS NOW

An example for **WEBM EVAL CONSULTS NOW** is displayed below.

```
VAH>D ^XPAREDIT
Press <Enter>


                    --- Edit Parameter Values ---


Select PARAMETER DEFINITION NAME: WEBM
WEBM EVAL CONSULTS NOW      Evaluate consults for maternity
WEBM EVAL LABS NOW      Evaluate labs for maternity
WEBM EVAL PROBLEMS NOW      Evaluate problems for maternity.
WEBM OCNT LOCATION      WEBM oCNT Network Address
CHOOSE 1-4: 1 WEBM EVAL CONSULTS NOW   Evaluate consults for maternity

---- Setting WEBM EVAL CONSULTS NOW  for System: SMA.FO-TEST.MED.VA.GOV ---
EVALUATE CONSULTS DURING PATIENT SEARCH: YES
```

7.1 Configure Triggering

As the names of various Consults, Labs, and Problems may differ from site to site, what is displayed below are examples of how to configure each type.

If not all of the names for each type are known, then this section may need to be revisited to configure them as necessary.

- **Consults** –What are the exact names of any consults or consult services pertaining to a new pregnancy?
- **Lab tests** –What are the names of labs done for pregnancy (beta HCG, Pregnancy Test, etc.) These are the test names as they are set up in the Laboratory Test file (60).
- **Problem List** –What problems would be entered on the CPRS Problems tab that indicate a new pregnancy? What are the problem descriptions and SNOMED codes?

7.2 Configure Consults

The procedure below illustrates the steps to enable triggering, for a specific Consult. **For this example**, the Consult is **Initial OB Referral (Initial Evaluation)**.

```
VAH>D Q^DI
```

```
Select OPTION: 1  ENTER OR EDIT FILE ENTRIES
INPUT TO WHAT FILE: WEBM TRIGGER CONSULT// WEBM TRIGGER CONSULTS
                                         (1 entry)

EDIT WHICH FIELD: ALL//
Select WEBM TRIGGER CONSULT REQUEST SERVICES: INITIAL OB REFERRAL   Are you
adding 'INITIAL OB REFERRAL' as
    a new WEBM TRIGGER CONSULT (the 2ND)? No// Y  (Yes) INACTIVE:
STATUS OF: C
CANCELLED        x
COMPLETE         c
CHOOSE 1-2: 2  COMPLETE      c
```

7.3 Configure Labs

The procedure below illustrates the steps to enable triggering, for a specific lab test, specimen and associated value. For this example, the associated parameters are: **Pregnancy Test** and **URINE 7X100**.

```
VAH>D Q^DI
Select OPTION: 1 ENTER OR EDIT FILE ENTRIES
 INPUT TO WHAT FILE: WEBM TRIGGER LABS      (3 entries)
EDIT WHICH FIELD: ALL//
 Select WEBM TRIGGER LAB TEST: Pregnancy Test       PREGNANCY TEST   Are you
adding 'PREGNANCY TEST' as
    a new WEBM TRIGGER LAB TEST (the 4TH)? No// y (Yes) INACTIVE:
Select SITE/SPECIMEN: Urine
URINE        7X100
URINE  24 HR URINE     URINE
CHOOSE 1-2: 1  URINE      7X100
  Are you adding 'URINE' as a new SITE/SPECIMEN (the 1ST for this WEBM
TRIGGER LAB TEST)?
No// y (Yes)
  POSITIVE LAB VALUE: POS Select SITE/SPECIMEN: Select PATIENT:
```

Log in with a user that can Sign Labs. Create a Lab order: Orders tab -> Laboratory -> Pregnancy Test -> URINE Lab in CPRS. Sign the newly created Lab, and get the order number:

In order to make the Lab trigger a flag, the user needs to add a positive result **POS** to the lab. In order to do that, we need to use the menu **D ^XUS.**

```
GOLD>S DUZ=1

GOLD>D ^XUS
                        W E L C O M E   T O

     ****** S I L V E R  - E H M P  V I S T A  Account *******

   Access privilege is based on specified need.  As a user on this system,
   YOU are responsible for complying with all security regulations
   regarding access.  YOU are not to share access codes with anyone or to
   access  accounts that do not pertain to YOUR job.  YOU are responsible
   for  maintaining  theintegrity, confidentiality, and security of all
   information  contained  in this system.


   USERs who use this system inappropriately will have their access
   teminated and removed from the system.

   VIEWing this message indicates that YOU agree with the terms of system
   use.
          MISUSE of this system constitutes a Federal Crime.
```

```
            *********************************************
              >>>> CPRS and VITALS are installed in this account <<<<<
                >> CPRS GUI Client is 1.0.30.72  Patch OR*3.0*350 <<
        >>  VITALS GUI MANAGER is at Cliet Version 5.0.26  Patch GMRV*5.0*26<<<
                >>>M O C H A 2.0 is disabled
            **************************************************************


Volume set: ROU:CACHE  UCI: GOLD  Device: /dev/pts/0 (97.68.114.106)

ACCESS CODE: ***************

Good morning FREY,ALINA
      You last signed on today at 09:53

ROLLOVER HAS NOT RUN. ACCESSIONING SHOULDN'T BE DONE NOW.

            ROLLOVER HAS BEEN TASKED  --  TRY ACCESSIONING LATER




    1        Phlebotomy menu ...
    2        Accessioning menu ...
    3        Process data in lab menu ...
    4        Quality control menu ...
    5        Results menu ...
    6        Information-help menu ...
    7        Ward lab menu ...
    8        Anatomic pathology ...
    9        Blood bank ...
    10       Microbiology menu ...
    11       Supervisor menu ...
    LSM    Lab Shipping Menu ...

Select Laboratory DHCP Menu <TEST ACCOUNT> Option: 3  Process data in lab
menu


    EA     Enter/verify data (auto instrument)
    EL     Enter/verify data (Load list)
    EM     Enter/verify/modify data (manual)
    EW     Enter/verify data (Work list)
    GA     Group verify (EA, EL, EW)
    MP     Misc. Processing Menu ...
           Accession order then immediately enter data
           Batch data entry (chem, hem, tox, etc.)
           Build a load/work list
           Bypass normal data entry
           Download a load list to an Instrument.
           Fast Bypass Data Entry/Verify
           Lookup accession
```

```
            Order/test status
            Print a load/work list
            Std/QC/Reps Manual Workload count
            Unload Load/Work List

Select Process data in lab menu <TEST ACCOUNT> Option: accession order then
imme
diately enter data


Select Performing Laboratory: CAMP MASTER//    NY  VAMC  500


Select Order number: 18874 (the lab order number circled above)

NINETEEN,OUTPATIENT            666-00-0619    Requesting location: UC
Date/Time Ordered: 12/12/2017 10:33        By: FREY,ALINA
  -Lab Order # 18874                       Provider: FREY,ALINA
  URINE
   PREGNANCY TEST    ROUTINE Requested (SEND PATIENT) for:  12/12/2017
Is this the correct order? Yes//   YES
Collection Date@Time: //t@10:33   (DEC 12, 2017@10:33:00)


ACCESSION:  CH 1212 4  <L673460004>
PREGNANCY TEST                  URINE

Sample: URINE
Specimen: URINE
1  PREGNANCY TEST

NINETEEN,OUTPATIENT  SSN: 666-00-0619     LOC: UC
Pat Info:                        Sex: FEMALE   Age: 27yr as of Dec 12, 2017
Provider: FREY,ALINA                 Voice pager:
   Phone:                           Digital pager:

ACCESSION:                           CH 1212 4 [L673460004]
                                     12/12 10:33d
PREGNANCY TEST //POS
Select COMMENT:
   (POS)
Select COMMENT:

NINETEEN,OUTPATIENT  SSN: 666-00-0619     LOC: UC
Pat Info:                        Sex: FEMALE   Age: 27yr as of Dec 12, 2017
Provider: FREY,ALINA                 Voice pager:
   Phone:                           Digital pager:

ACCESSION:                           CH 1212 4 [L673460004]
                                     12/12 10:33d
PREGNANCY TEST                              POS
COMMENTS:
```

```
SELECT ('E' to Edit, 'C' for Comments, 'W' Workload):<enter>
Approve for release by entering your initials: AF



   EA     Enter/verify data (auto instrument)
   EL     Enter/verify data (Load list)
   EM     Enter/verify/modify data (manual)
   EW     Enter/verify data (Work list)
   GA     Group verify (EA, EL, EW)
   MP     Misc. Processing Menu ...
          Accession order then immediately enter data
          Batch data entry (chem, hem, tox, etc.)
          Build a load/work list
          Bypass normal data entry
          Download a load list to an Instrument.
          Fast Bypass Data Entry/Verify
          Lookup accession
          Order/test status
          Print a load/work list
          Std/QC/Reps Manual Workload count
          Unload Load/Work List
```

7.4 Configure Problems

The procedure below illustrates the steps to enable triggering, for a specific problem. For this example, the problem is: **Pregnancy test positive**.

1. Open a VistA session and complete the following:

```
VAH>D Q^DI
VA FileMan 22.0
Select OPTION: 1        ENTER OR EDIT FILE ENTRIES
INPUT TO WHAT FILE: WEBM TRIGGER PROBLEMS//  EDIT WHICH FIELD: ALL//
     Note: Enter the SNOWMED code.
Select WEBM TRIGGER PROBLEMS CODE: 250423000
     Searching for a ICD, (pointed-to by CODE)      Searching for a SCT,
(pointed-to by CODE)   ??
      A suitable term could not be found based on user input
  Enter Term/Concept:<ENTER>
     Searching for a ICD
     Searching for a SCT
250423000   Pregnancy test positive    250423000    SCT    Preferred
Active Primary
       ...OK? Yes//y   (Yes)
  Are you adding 'Pregnancy test positive' as
   a new WEBM TRIGGER PROBLEMS (the 3RD)? No// y  (Yes) INACTIVE:
Select PATIENT:
```

2. In CPRS, perform a search of the problem that will be used (Pregnancy test positive in this case), and take note of the code (SNOWMED CT) associated with the problem.

Figure 10: Problem List to Search

8   Users Setup

8.1 Create Users

```
GOLD>S DUZ=1

GOLD>D Q^DI


VA FileMan 22.2


Select OPTION: 1  ENTER OR EDIT FILE ENTRIES



Input to what File: DEVICE// NEW PERSON    (1476 entries)
EDIT WHICH FIELD: ALL//NAME
THEN EDIT FIELD: ACCESS CODE  Want to edit ACCESS CODE (Y/N)
THEN EDIT FIELD: VERIFY CODE
THEN EDIT FIELD: ELETRONIC SIGNATURE CODE


Select NEW PERSON NAME: STEPHENS,JOSH
  Are you adding 'STEPHENS,JOSH' as a new NEW PERSON (the 1477TH)? No// Y
(Yes)
Checking SOUNDEX for matches.
No matches found.
   NEW PERSON CITY: INDIAN HARBOUR BEACH
   NEW PERSON STATE: FLORIDA
   NEW PERSON INITIAL: JS
   NEW PERSON MAIL CODE: 32937
Want to edit ACCESS CODE (Y/N): Y
Enter a new ACCESS CODE <Hidden>: ******
Please re-type the new code to show that I have it right: ******
OK, Access code has been changed!
The VERIFY CODE has been deleted as a security measure.
You will need to enter a new VERIFY code so the user can sign-on.


Select NEW PERSON NAME: LORD,BRIAN
  Are you adding 'LORD,BRIAN' as a new NEW PERSON (the 1478TH)? No// Y  (Yes)
Checking SOUNDEX for matches.
No matches found.
   NEW PERSON CITY: DURHAM
   NEW PERSON STATE: NC  NORTH CAROLINA
   NEW PERSON INITIAL: BL
   NEW PERSON MAIL CODE: 27711
Want to edit ACCESS CODE (Y/N): Y
Enter a new ACCESS CODE <Hidden>: ******
```

```
Please re-type the new code to show that I have it right: ******
OK, Access code has been changed!
The VERIFY CODE has been deleted as a security measure.
You will need to enter a new VERIFY code so the user can sign-on.



Select NEW PERSON NAME: FREY,ALINA
   Are you adding 'FREY,ALINA' as a new NEW PERSON (the 1479TH)? No// Y  (Yes)
Checking SOUNDEX for matches.
No matches found.
    NEW PERSON CITY: INDIAN HARBOUR BEACH
    NEW PERSON STATE: FLORIDA
    NEW PERSON INITIAL: AF
    NEW PERSON MAIL CODE: 32937
Want to edit ACCESS CODE (Y/N): Y
Enter a new ACCESS CODE <Hidden>: ******
Please re-type the new code to show that I have it right: ******
OK, Access code has been changed!
The VERIFY CODE has been deleted as a security measure.
You will need to enter a new VERIFY code so the user can sign-on.



Select NEW PERSON NAME: WALTERS,SCOTTY
   Are you adding 'WALTERS,SCOTTY' as a new NEW PERSON (the 1479TH)? No// Y
(Yes)
Checking SOUNDEX for matches.
No matches found.
    NEW PERSON CITY: INDIAN HARBOUR BEACH
    NEW PERSON STATE: FLORIDA
    NEW PERSON INITIAL: SW
    NEW PERSON MAIL CODE: 32937
Want to edit ACCESS CODE (Y/N): Y
Enter a new ACCESS CODE <Hidden>: ******
Please re-type the new code to show that I have it right: ******
OK, Access code has been changed!
The VERIFY CODE has been deleted as a security measure.
You will need to enter a new VERIFY code so the user can sign-on.



Select NEW PERSON NAME: ^
```

8.2 Add Verify Code for the created users

```
Select OPTION: 1  ENTER OR EDIT FILE ENTRIES

Input to what File: NEW PERSON//          (1479 entries)
EDIT WHICH FIELD: ALL// VERIFY
     1   VERIFY CODE  Want to edit VERIFY CODE (Y/N)
     2   VERIFY CODE never expires
```

```
CHOOSE 1-2: 1  Want to edit VERIFY CODE (Y/N)
THEN EDIT FIELD:


Select NEW PERSON NAME: JS
    1   JS   PROVIDER,TWOHUNDREDTHIRTYNINE           JS      10BA1/ADP
Physician
    2   JS   PROVIDER,FIVEHUNDREDFOUR            JS      10BA1/ADP
Physician
    3   JS   STEPHENS,JOSH     INDIAN HARBOUR BEACH     FLORIDA     JS
32937
    4   JSH  PROGRAMMER,FOURTEEN           JSH     10BA1/ADP     COMPUTER
SPECIALIST
    5   JSR  LABTECH,SPECIAL           JSR         COMPUTER SPECIALIST
CHOOSE 1-5: 3  STEPHENS,JOSH     INDIAN HARBOUR BEACH     FLORIDA     JS
32937

Want to edit VERIFY CODE (Y/N): Y
Enter a new VERIFY CODE: ********

Please re-type the new code to show that I have it right: ********

OK, Verify code has been changed!



Select NEW PERSON NAME: frey   FREY,ALINA       INDIAN HARBOUR BEACH
FLORIDA     AF     32937
Want to edit VERIFY CODE (Y/N): y

Enter a new VERIFY CODE: ********

Please re-type the new code to show that I have it right: ********

OK, Verify code has been changed!



Select NEW PERSON NAME: lord   LORD,BRIAN       DURHAM     NORTH CAROLINA
BL     27711
Want to edit VERIFY CODE (Y/N): y

Enter a new VERIFY CODE: ********

Please re-type the new code to show that I have it right: ********

OK, Verify code has been changed!



Select NEW PERSON NAME: walters   WALTERS,SCOTTY      INDIAN HARBOUR BEACH
FLORIDA     SW     32937
Want to edit VERIFY CODE (Y/N): y
```

```
Enter a new VERIFY CODE: ********

Please re-type the new code to show that I have it right: ********

OK, Verify code has been changed!


Select NEW PERSON NAME: ^
Select OPTION: ^
```

8.3 Allocate keys to the new users

```
GOLD>S DUZ=1

GOLD>S $P(^VA(200,DUZ,0),"^",4)="@"

GOLD>D ^XUP

Setting up programmer environment
This is a TEST account.

Terminal Type set to: C-VT100

You have 166 new messages.
Select OPTION NAME: XUMAINT        Menu Management


          Edit options
          Key Management ...
          Secure Menu Delegation ...
          Restrict Availability of Options
          Option Access By User
          List Options by Parents and Use
          Fix Option File Pointers
          Help Processor ...
   OPED   Screen-based Option Editor
          Display Menus and Options ...
          Menu Rebuild Menu ...
          Out-Of-Order Set Management ...
          See if a User Has Access to a Particular Option
          Show Users with a Selected primary Menu


You have PENDING ALERTS
          Enter  "VA to jump to VIEW ALERTS option


You've got PRIORITY mail!
```

Select Menu Management <TEST ACCOUNT> Option: **KEY** Management

```
            Allocation of Security Keys
            De-allocation of Security Keys
            Enter/Edit of Security Keys
            All the Keys a User Needs
            Change user's allocated keys to delegated keys
            Delegate keys
            Keys For a Given Menu Tree
            List users holding a certain key
            Remove delegated keys
            Show the keys of a particular user
```

You have PENDING ALERTS
            Enter "VA to jump to VIEW ALERTS option

You've got PRIORITY mail!

Select Key Management <TEST ACCOUNT> Option: **ALL**
     1   All the Keys a User Needs
     2   Allocation of Security Keys
CHOOSE 1-2: **2** Allocation of Security Keys

Allocate key: **XUMGR**

Another key: **XUPROG**
     1   XUPROG
     2   XUPROGMODE
CHOOSE 1-2: **1** XUPROG

Another key: **XUPROGMODE**

Another key: **XMMGR**

Another key: **XUSPF200**

Same for these keys:
Another key: **CPRS TAB**
Another key: **WEBM DDCS CONFIG**

Holder of key: **STEPHENS,**JOSH   INDIAN HARBOUR BEACH   FLORIDA   JS
3
2937

Another holder: **LORD,**BRIAN   DURHAM   NORTH CAROLINA   BL   27711

```
Another holder: FREY,ALINA        INDIAN HARBOUR BEACH     FLORIDA     AF
329
37

Another holder: WALTERS,SCOTTY        INDIAN HARBOUR BEACH     FLORIDA     SW
32937

You've selected the following keys:

C

You've selected the following holders:

STEPHENS,JOSH             LORD,BRIAN                FREY,ALINA

You are allocating keys.  Do you wish to proceed? YES//

XUPROG being assigned to:
     STEPHENS,JOSH
     LORD,BRIAN
     FREY,ALINA
     WALTERS,SCOTTY

XUMGR being assigned to:
     STEPHENS,JOSH
     LORD,BRIAN
     FREY,ALINA
     WALTERS,SCOTTY

XUPROGMODE being assigned to:
     STEPHENS,JOSH
     LORD,BRIAN
     FREY,ALINA
     WALTERS,SCOTTY

XMMGR being assigned to:
     STEPHENS,JOSH
     LORD,BRIAN
     FREY,ALINA
     WALTERS,SCOTTY

XUSPF200 being assigned to:
     STEPHENS,JOSH
     LORD,BRIAN
     FREY,ALINA
     WALTERS,SCOTTY


        Allocation of Security Keys
        De-allocation of Security Keys
        Enter/Edit of Security Keys
        All the Keys a User Needs
        Change user's allocated keys to delegated keys
```

```
        Delegate keys
        Keys For a Given Menu Tree
        List users holding a certain key
        Remove delegated keys
        Show the keys of a particular user


You have PENDING ALERTS
        Enter  "VA to jump to VIEW ALERTS option


You've got PRIORITY mail!


Select Key Management <TEST ACCOUNT> Option: ^


        Edit options
        Key Management ...
        Secure Menu Delegation ...
        Restrict Availability of Options
        Option Access By User
        List Options by Parents and Use
        Fix Option File Pointers
        Help Processor ...
   OPED Screen-based Option Editor
        Display Menus and Options ...
        Menu Rebuild Menu ...
        Out-Of-Order Set Management ...
        See if a User Has Access to a Particular Option
        Show Users with a Selected primary Menu


You have PENDING ALERTS
        Enter  "VA to jump to VIEW ALERTS option


You've got PRIORITY mail!


Select Menu Management <TEST ACCOUNT> Option: ^
```

8.4 Add Primary and Secondary menus to the new users

```
GOLD>S DUZ=1
GOLD>D ^XUP


Setting up programmer environment
This is a TEST account.
```

Terminal Type set to: C-VT100

You have 166 new messages.
Select OPTION NAME: **XUSERED**
    1   XUSEREDIT   Edit an Existing User
    2   XUSEREDITSELF   Edit User Characteristics
CHOOSE 1-2: **1** EVXUSEREDIT   Edit an Existing User
Edit an Existing User
Select NEW PERSON NAME: **STEPHENS,**JOSH   INDIAN HARBOUR BEACH   FLORIDA
 JS   32937
                    Edit an Existing User
NAME: **STEPHENS,JOSH**   Page 1 of
5

_____
__
   NAME... STEPHENS,JOSH   INITIAL: JS
    TITLE: NICK NAME: **BOSS**
      SSN:**<MUST ENTER 9 DIGIT>**   DOB:
  DEGREE: MAIL CODE: **32937**
  DISUSER: TERMINATION DATE:
  Termination Reason:

        PRIMARY MENU OPTION: **EVE**
  Select SECONDARY MENU OPTIONS: **OR CPRS GUI CHART**

NOTE: When editing SECONDARY MENU OPTIONS field, enter the following values:
WEBM DDCS CONTEXT
WEBM GUI CONTEXT
WEBM MAIN

Want to edit ACCESS CODE (Y/N):   FILE MANAGER ACCESS CODE:
Want to edit VERIFY CODE (Y/N):

        Select DIVISION:
        SERVICE/SECTION: **INFORMATION RESOURCE MGMT**
_____
__

Exit   Save   Next Page   Previous Page   Refresh   Quit

Enter a COMMAND, or "^" followed by the CAPTION of a FIELD to jump to.

COMMAND: NEXT   Press <PF1>H for help
Insert
                  Edit an Existing User
NAME: STEPHENS,JOSH   Page 2 of
5

_____
__

  NETWORK USERNAME:
  TIMED READ (# OF SECONDS): **1800**
       MULTIPLE SIGN-ON: **ALLOWED**   MULTIPLE SIGN-ON LIMIT: **5**

```
     ASK DEVICE TYPE AT SIGN-ON:                         AUTO MENU:
PROHIBITED TIMES FOR SIGN-ON:                           TYPE-AHEAD:
                                                      AUTO SIGN-ON:
           Preferred Editor: SCREEN EDITOR - VA FILEMAN


     ALLOWED TO USE SPOOLER:                              PAC:
CAN MAKE INTO A MAIL MESSAGE:


                  FILE RANGE:
     ALWAYS SHOW SECONDARIES:

_____
__

Exit    Save    Next Page    Previous Page    Refresh    Quit

Enter a COMMAND, or "^" followed by the CAPTION of a FIELD to jump to.



GOLD>
```

Do the same for the other users.

8.4.1. Modify the web.config

Find web.config in the top level of the code installation, root installation directory.

Change AppContext key to the name of the new namespace to match this

<add key="AppContext" value="WEBM GUI CONTEXT" />

8.5 Assign SECURITY KEY

GOLD>**S DUZ=1**

GOLD>**D ^XUP**

```
Setting up programmer environment
This is a TEST account.

Terminal Type set to: C-VT100

You have 166 new messages.
Select OPTION NAME: XUMAINT        Menu Management


        Edit options
```

```
              Key Management ...
              Secure Menu Delegation ...
              Restrict Availability of Options
              Option Access By User
              List Options by Parents and Use
              Fix Option File Pointers
              Help Processor ...
    OPED      Screen-based Option Editor
              Display Menus and Options ...
              Menu Rebuild Menu ...
              Out-Of-Order Set Management ...
              See if a User Has Access to a Particular Option
              Show Users with a Selected primary Menu


You have PENDING ALERTS
          Enter  "VA to jump to VIEW ALERTS option



You've got PRIORITY mail!


Select Menu Management <TEST ACCOUNT> Option: KEY Management


              Allocation of Security Keys
              De-allocation of Security Keys
              Enter/Edit of Security Keys
              All the Keys a User Needs
              Change user's allocated keys to delegated keys
              Delegate keys
              Keys For a Given Menu Tree
              List users holding a certain key
              Remove delegated keys
              Show the keys of a particular user


You have PENDING ALERTS
          Enter  "VA to jump to VIEW ALERTS option



You've got PRIORITY mail!


Select Key Management <TEST ACCOUNT> Option: ALLOCATION of Security Keys

Allocate key: WEBM DDCS CONFIG

Another key:

Holder of key: STEPHENS,JOSH     INDIAN HARBOUR BEACH    FLORIDA    JS
3
2937
```

Another holder: **LORD**,BRIAN   DURHAM   NORTH CAROLINA   BL   27711

Another holder: **FREY**,ALINA   INDIAN HARBOUR BEACH   FLORIDA   AF
329
37

Another holder:

You've selected the following keys:

WEBM DDCS CONFIG

You've selected the following holders:

STEPHENS,JOSH   LORD,BRIAN   FREY,ALINA
      WALTERS,SCOTTY

You are allocating keys. Do you wish to proceed? YES// **YES**

WEBM DDCS CONFIG being assigned to:
      STEPHENS,JOSH
      LORD,BRIAN
      FREY,ALINA
      WALTERS,SCOTTY

        Allocation of Security Keys
        De-allocation of Security Keys
        Enter/Edit of Security Keys
        All the Keys a User Needs
        Change user's allocated keys to delegated keys
        Delegate keys
        Keys For a Given Menu Tree
        List users holding a certain key
        Remove delegated keys
        Show the keys of a particular user

You have PENDING ALERTS
        Enter "VA to jump to VIEW ALERTS option

You've got PRIORITY mail!

Select Key Management <TEST ACCOUNT> Option:

8.6 Assign CPRS TAB

```
VISTA>D Q^DI
VA FileMan 22.0
Select OPTION: 1  ENTER OR EDIT FILE ENTRIES
INPUT TO WHAT FILE: DEVICES// NEW PERSON
EDIT WHICH FIELD: ALL// KEYS
    1   KEYS    (multiple)
    2   KEYSTROKES FROM LM WP
  CHOOSE 1-2: 1  KEYS  (multiple)
          EDIT WHICH KEYS SUB-FIELD: ALL// (Hit enter here)
THEN EDIT FIELD: CPRS TAB    (multiple)
   EDIT WHICH CPRS TAB SUB-FIELD: ALL// (Hit enter here)
THEN EDIT FIELD: RESTRICT PATIENT SELECTION
 THEN EDIT FIELD: (Hit enter here)
Select NEW PERSON NAME: SM  MANAGER,SYSTEM    SM         Clinical
Coordinator
Select KEY: // ORES
        ...OK? Yes//   (Yes)
  KEY: ORES//
  REVIEW DATE:
Select KEY: // PROVIDER
        ...OK? Yes//   (Yes)
  KEY: PROVIDER//
  REVIEW DATE:
Select KEY:  (Hit enter here)
Select CPRS TAB: // RPT
    EFFECTIVE DATE:// MAY 1,2003
    EXPIRATION DATE:// MAY 1,2020
  CPRS TAB: RPT// COR       CPRS GUI "core" tabs.
   Are you adding 'RPT' as a new CPRS TAB (the 2ND for this NEW PERSON)?
No// Y
    EFFECTIVE DATE:// MAY 1,2003
    EXPIRATION DATE:// MAY 1,2020
Select CPRS TAB: (Hit enter here)
RESTRICT PATIENT SELECTION:// No  NO
Select NEW PERSON NAME:(Hit enter here)
Select OPTION:(Hit enter here)
VISTA>
```

1.   At the VISTA prompt, enter D ^ZTMB to start TaskMan

2.   Then start BROKER listening on port 9210 by entering the following at the VISTA prompt:
D STRT^XWBTCP(9210) You may choose another port – OpenVista uses 9200.

```
USER>D ^%CD
```

```
Namespace: VISTA

You're in namespace VISTA

Default directory is c:\cachesys\mgr\vista\

VISTA>D ^ZTMB

VISTA>D STRT^XWBTCP(9210)

Start TCP Listener...
Checking if TCP Listener has started...
TCP Listener started successfully.
VISTA>
```

8.7 Assign Electronic Signature

```
GOLD>S DUZ=1

GOLD>D Q^DI


VA FileMan 22.2


Select OPTION: 1  ENTER OR EDIT FILE ENTRIES


Input to what File: NEW PERSON// new perSON    (1478 entries)
EDIT WHICH FIELD: ALL// electroNIC SIGNATURE CODE
THEN EDIT FIELD:


Select NEW PERSON NAME: frey  FREY,ALINA      MELBOURNE     FLORIDA     AF
32937
ELECTRONIC SIGNATURE CODE: af1234!!


Select NEW PERSON NAME: steph  STEPHENS,JOSH      MELBOURNE     FLORIDA
JS    32937
ELECTRONIC SIGNATURE CODE: js1234!!


Select NEW PERSON NAME:
```

9 Configure IIS Server

1. Use Remote Desktop to connect to the Windows Server 2012 machine.
2. On the Windows Server 2012 machine, create a **WebDeploy** folder under **C:\inetpub.**
   Windows Server 2012 should already have the **inetpub** located under the C: drive, if not,
   create it.
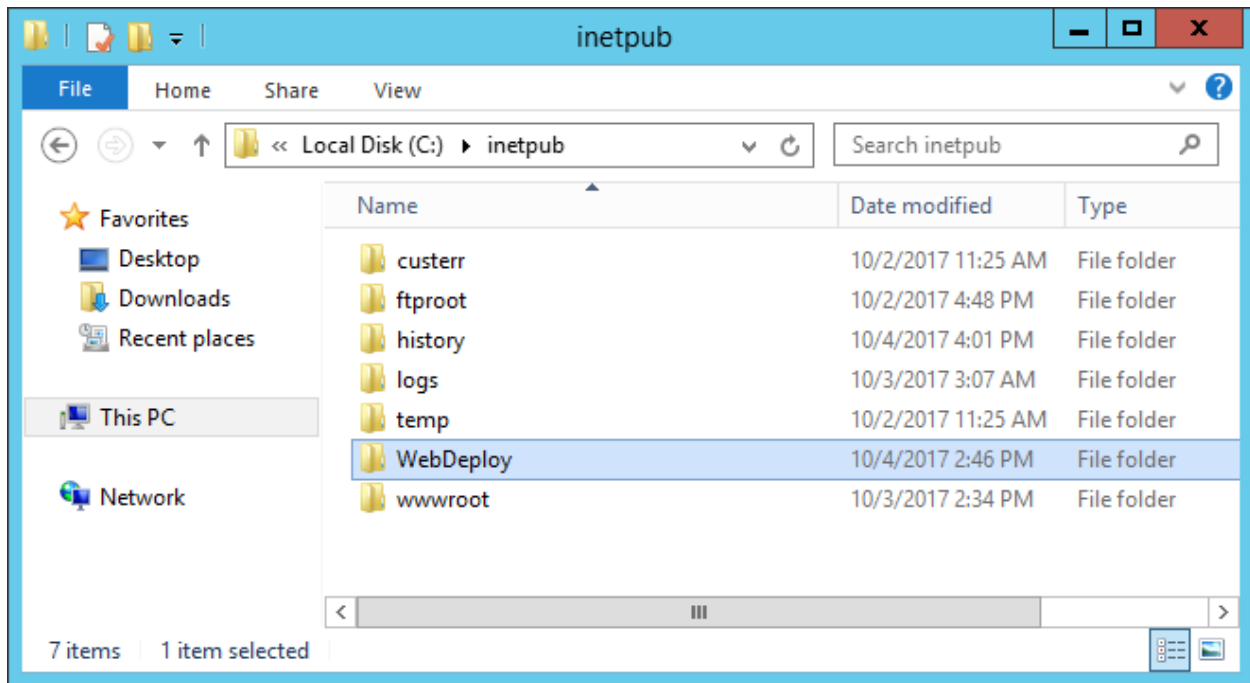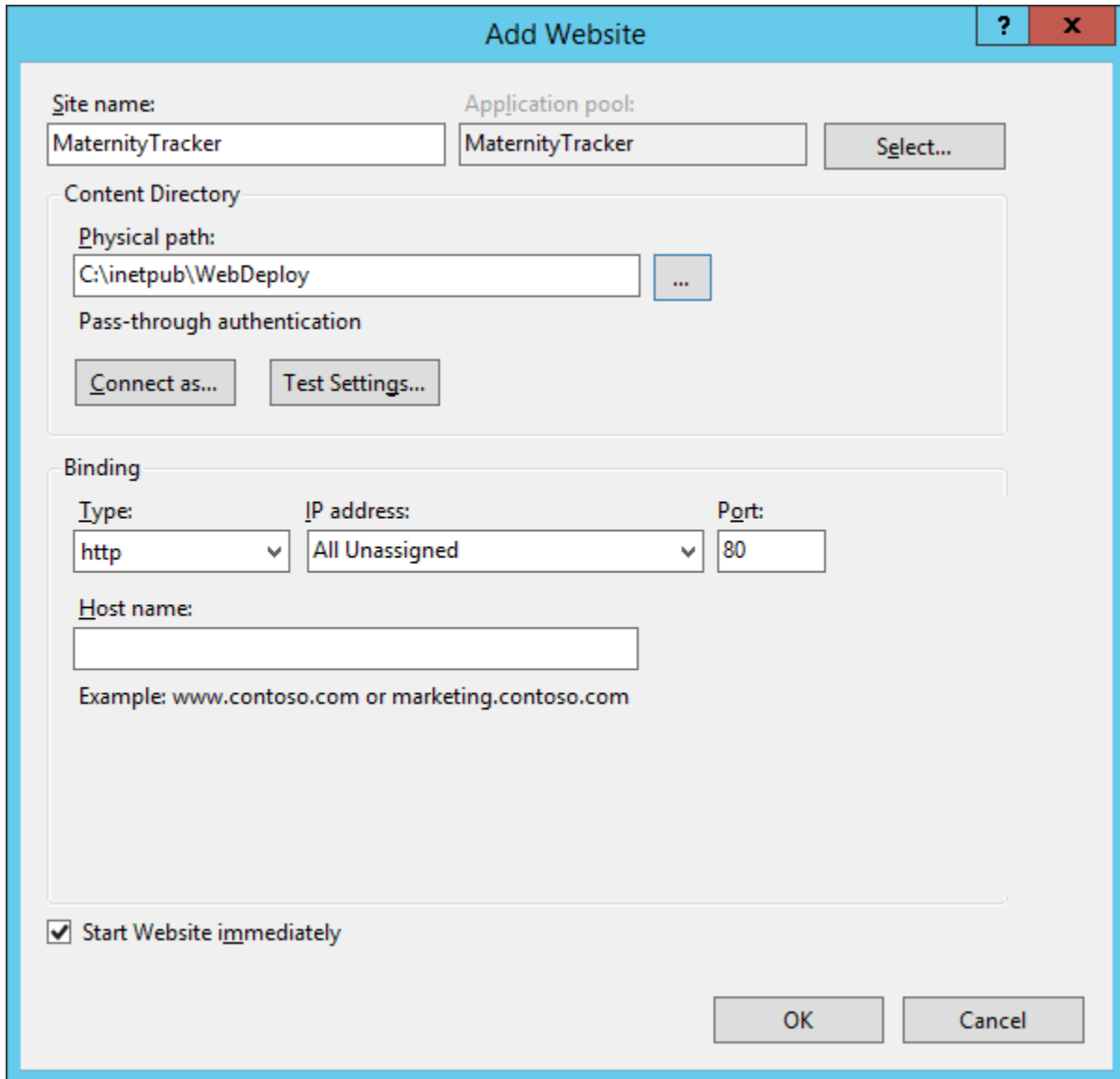
3. Click on Start > Server Manager to open server manager.
4. From Server Manager, click the IIS tab and double click the IIS Instance Name.
   Alternatively, click the Windows button and type "IIS Manager"
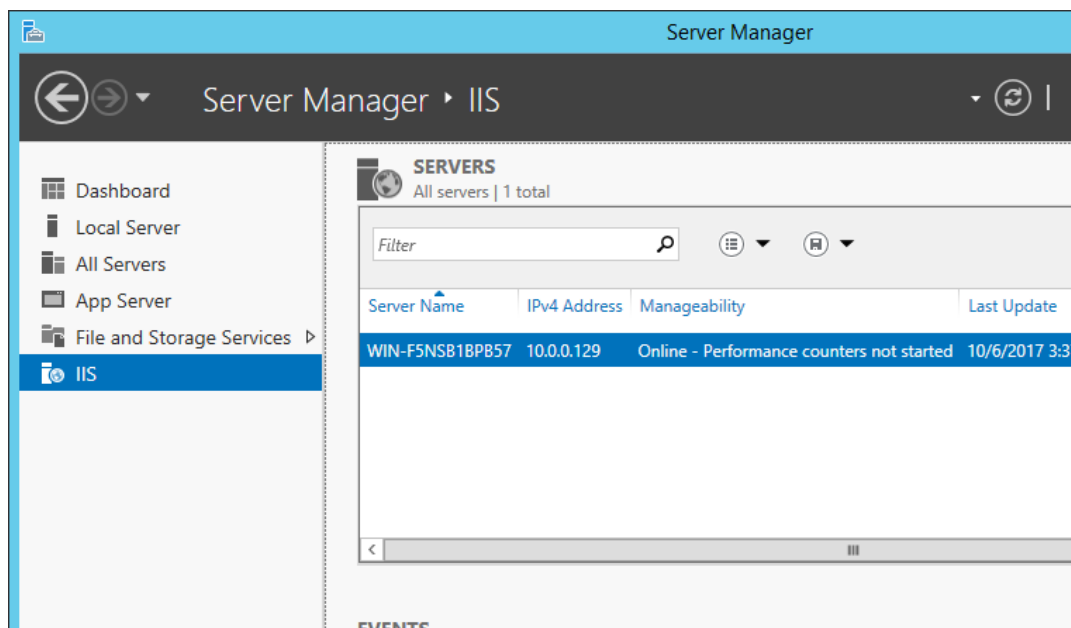
5. In IIS Manager, right click "Sites" and select "Add Website…"
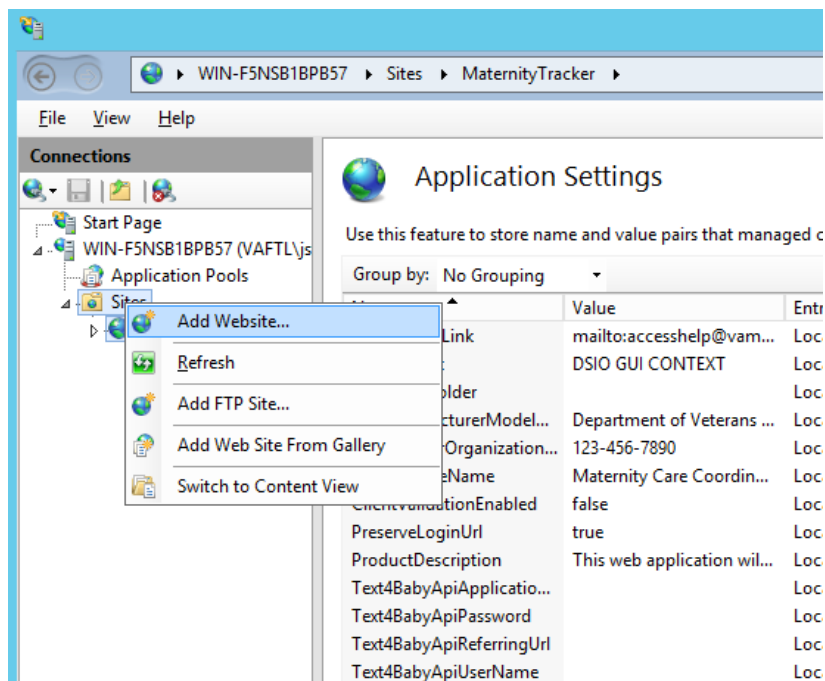
6. Enter "MaternityTracker" as the Site name. Select "C:\inetpub\WebDeploy" as the
    Physical Path. Select "OK".
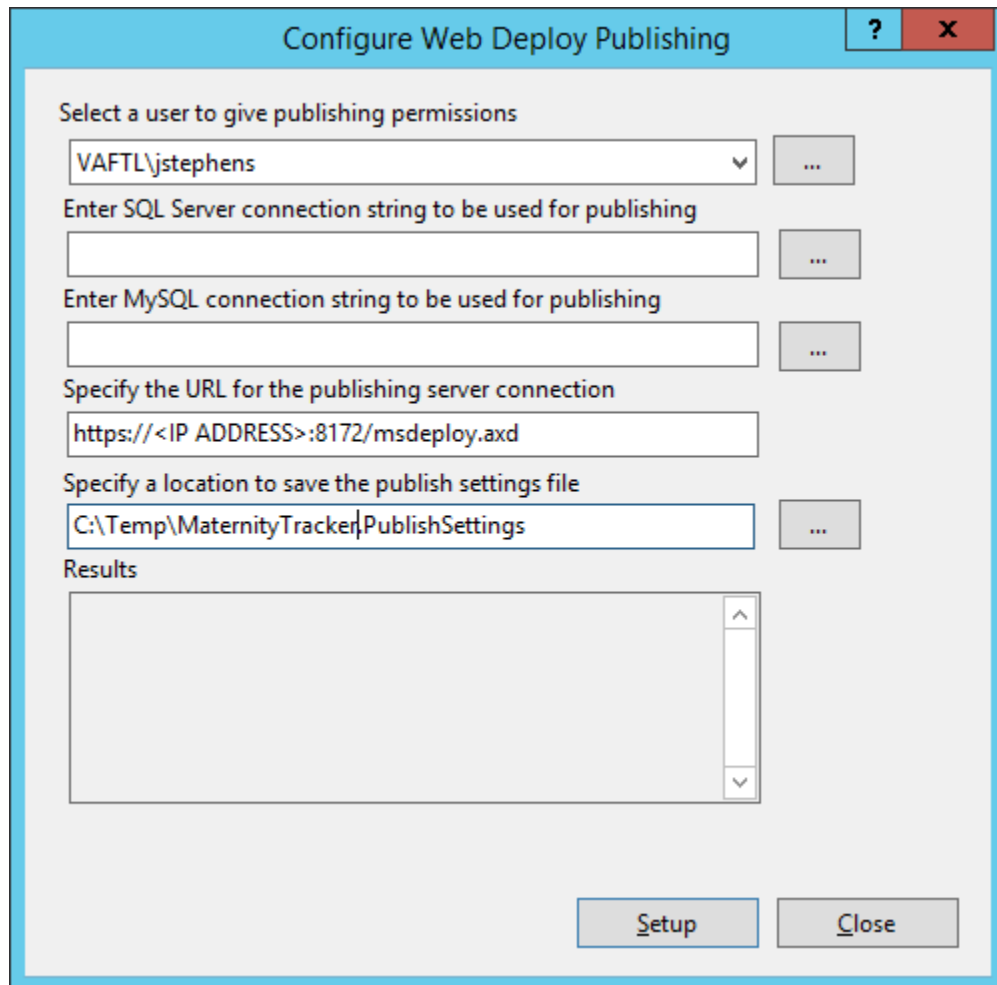
7. MaternityTracker site will be added to the Sites.
8. Right click the "MaternityTracker" website, go to "Deploy" -> "Configure Web Deploy Publishing…"
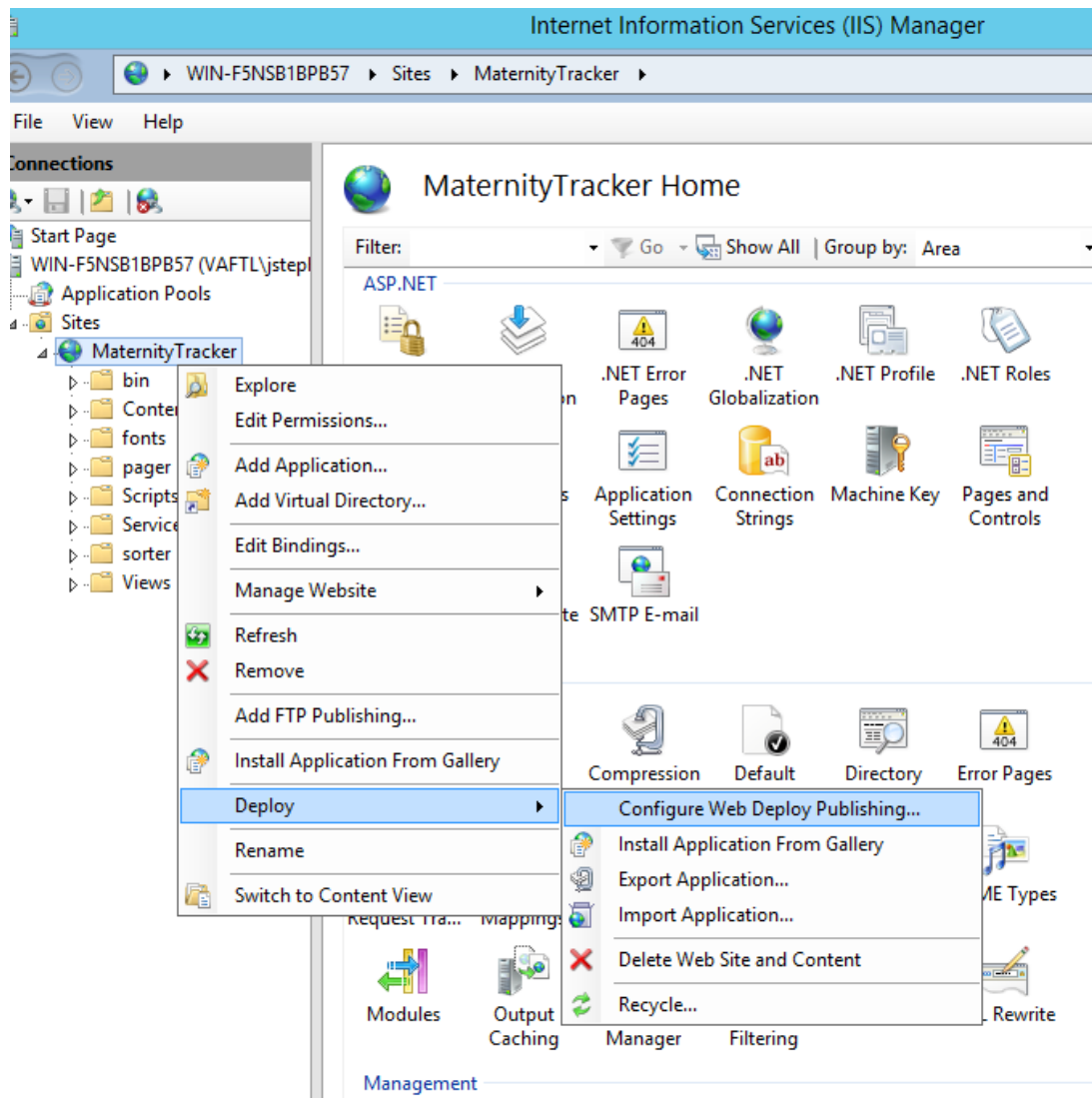
9. Enter your fully qualified username, enter the IP Address of the IIS server, and the location at which you would like the publishing configuration file saved.

10. Copy the file created in the previous step (**C:\Temp\MaternityTracker.PublishSettings**) to the machine running Visual Studio. Remote Desktop allows copying files from the remote machine to local machine.
11. Open the file in a text editor and ensure the following fields are appropriate:

```
<?xml version="1.0" encoding="utf-8"?>
<publishData>
  <publishProfile
    publishUrl="https://<IIS SERVER IP>:8172/msdeploy.axd"
    msdeploySite="MCCDashboardTest"
    destinationAppUrl="http://<IIS SERVER IP>:<PORT>/MCCDashboardTest"
    mySQLDBConnectionString=""
    SQLServerDBConnectionString=""
    profileName="Default Settings"
```

```
    publishMethod="MSDeploy"
    userName="<FQ USERNAME>" />
</publishData>
```
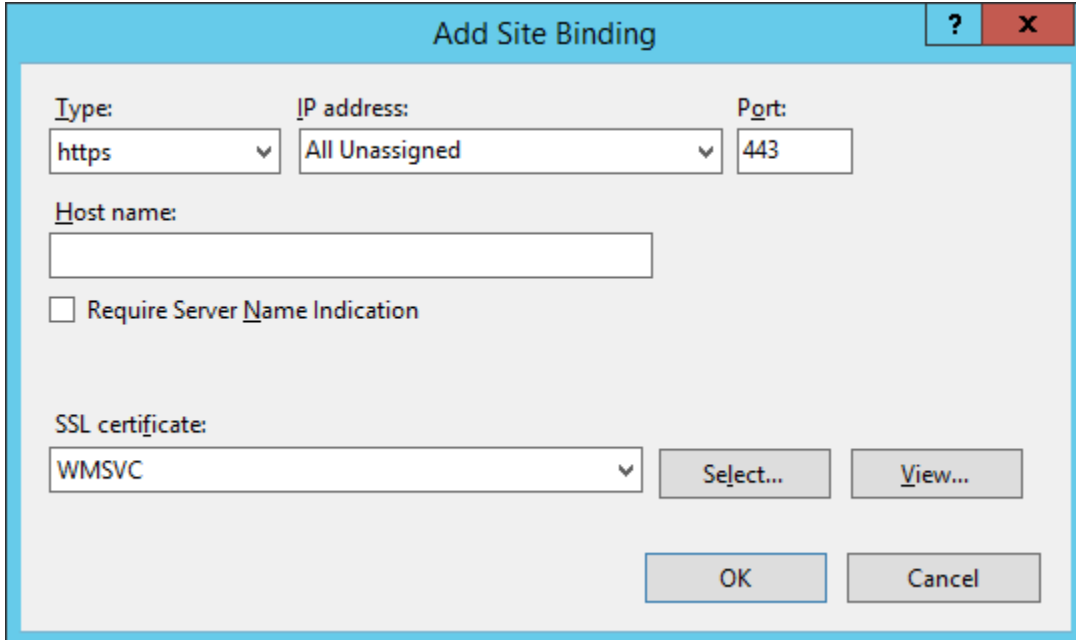
12. On the IIS Server, ensure the Maternity Tracker Website is selected and click "Bindings…" under the Actions pane on the right.
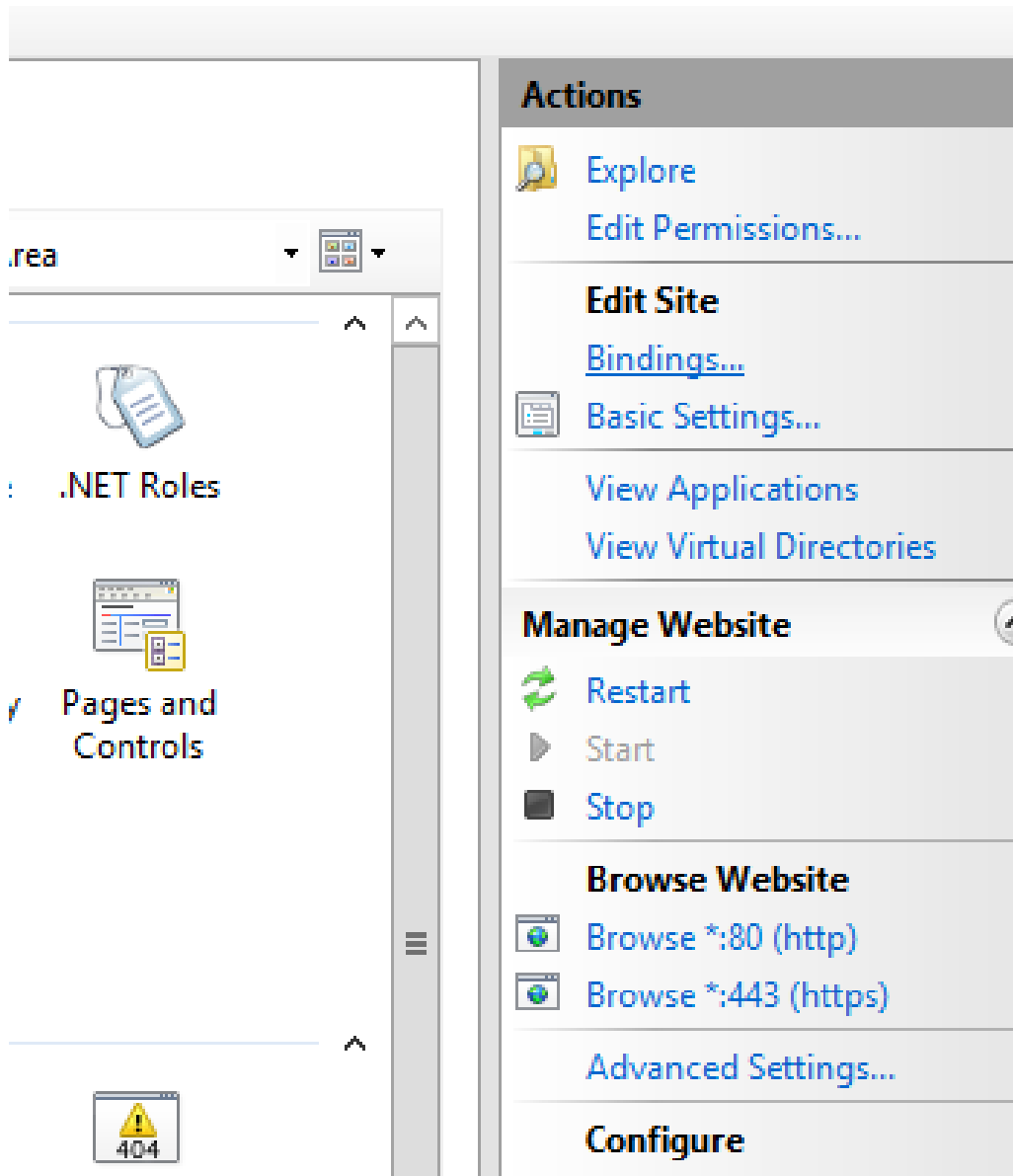
13. Here you will find all the port and protocol bindings for the website. Click "Add..." to add the https protocol and port.

Type	Host Name	Port	IP Address	Binding Informa...
http		80	*	
https		443	*	

Site Bindings

Add...
Edit...
Remove
Browse
Close
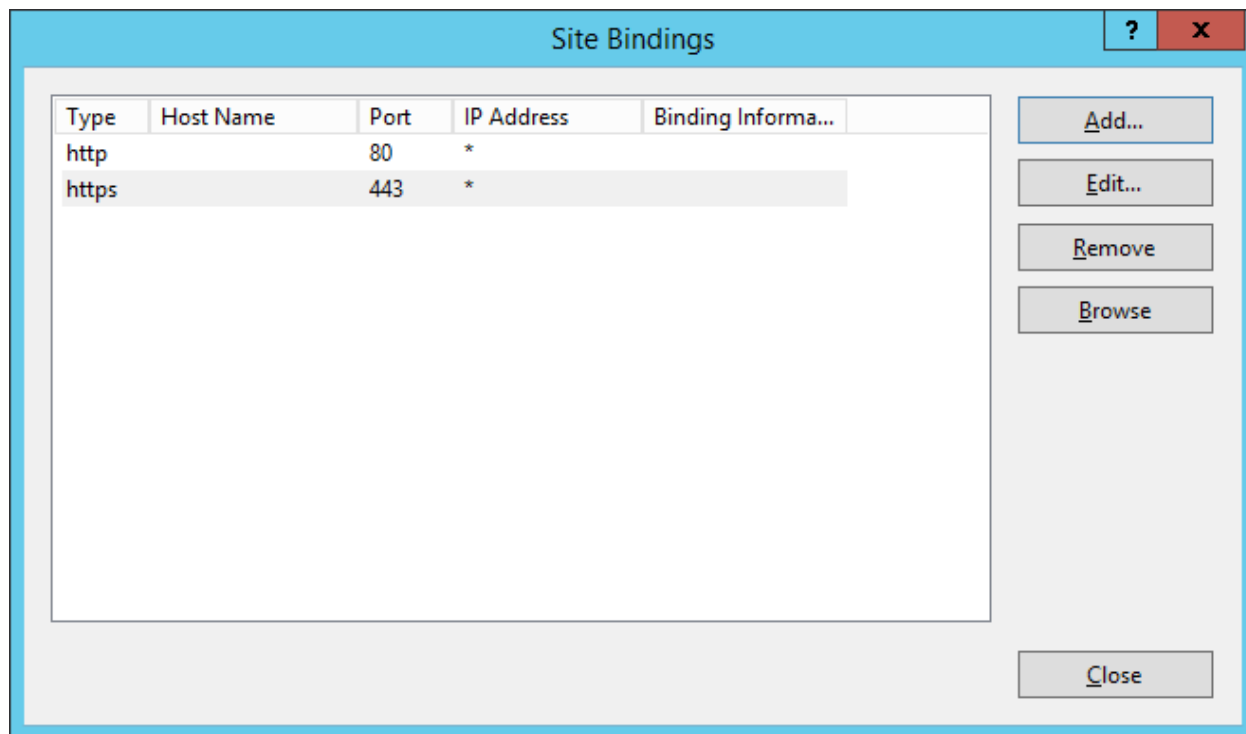
14. Change the Type to https, the port should automatically update to 443. Leave Host name blank. Select server's SSL certificate. If you have a signed certificate from a certificate authority service, you would select that here.

10 Deploy Maternity Tracker Dashboard to IIS

1. On the local machine, open Visual Studio, and the Maternity-Tracker project.
2. In Visual Studio, right click **va.gov.artemis.ui** and click "Publish...":
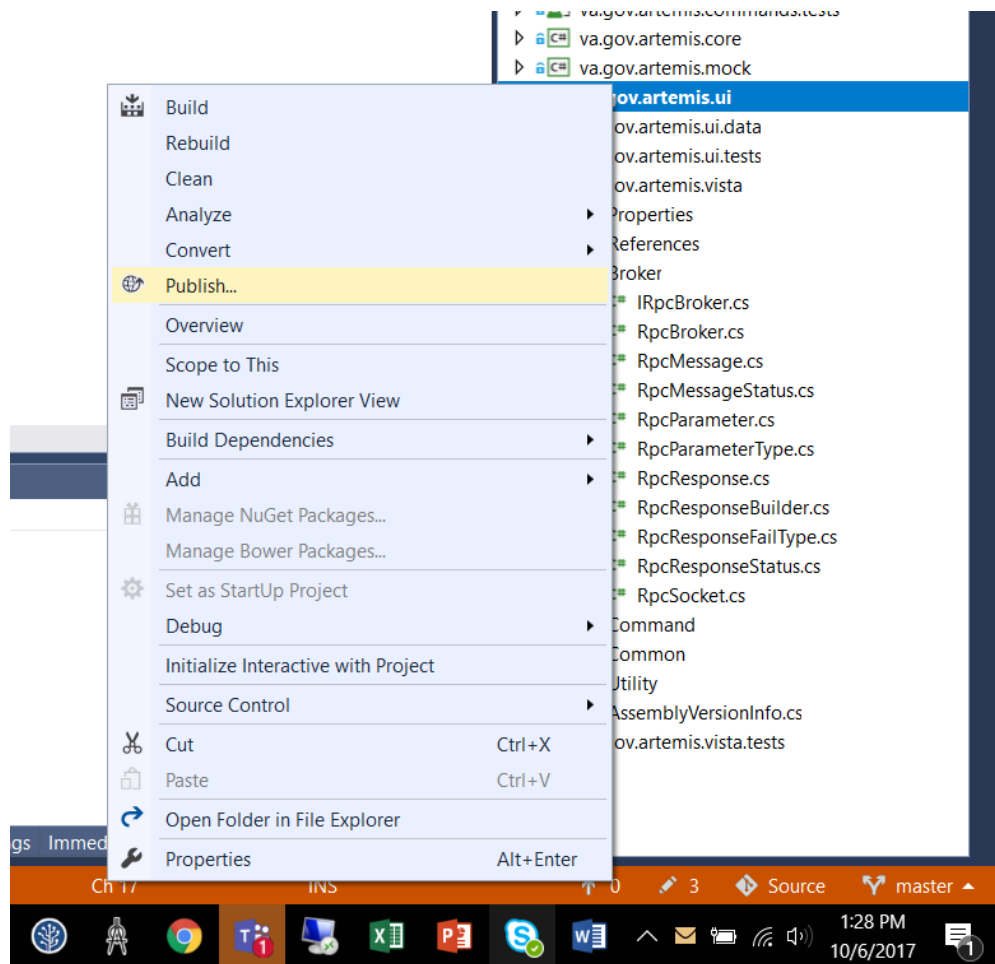
3. With the Publish pane selected on the left, make sure that the select **Import profile**. If a profile is already selected, click on the link **Create new profile**. Select the profile publishing file you generated from IIS in the last section.
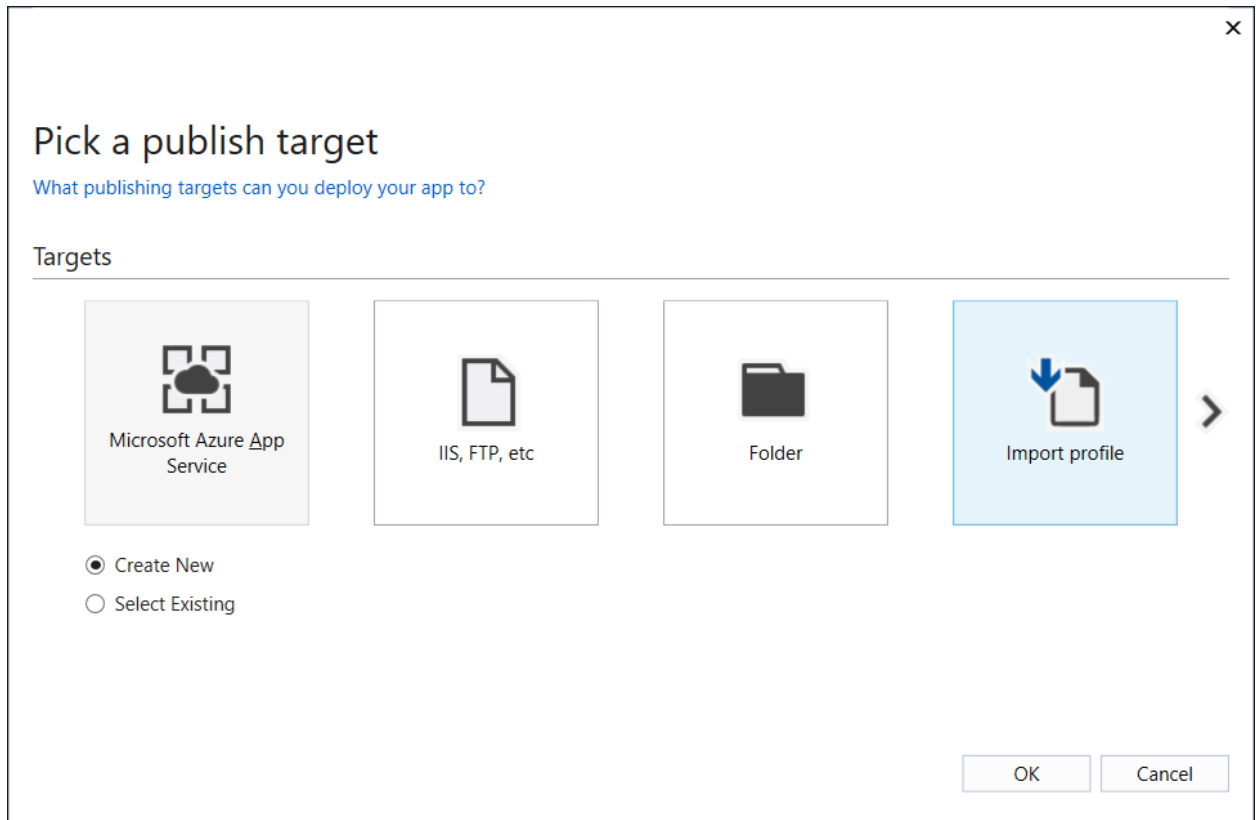
4. Ensure all information in the Summary pane is correct and click "Publish".

5. When prompted, enter your credentials for the destination IIS server

6. Ensure that the publish was successful

```
7>Updating file (MaternityTracker\bin\va.gov.artemis.cda.pdb).
7>Updating file (MaternityTracker\bin\VA.Gov.Artemis.Commands.dll).
7>Updating file (MaternityTracker\bin\VA.Gov.Artemis.Commands.pdb).
7>Updating file (MaternityTracker\bin\VA.Gov.Artemis.Core.dll).
7>Updating file (MaternityTracker\bin\VA.Gov.Artemis.Core.pdb).
7>Updating file (MaternityTracker\bin\VA.Gov.Artemis.UI.Data.dll).
7>Updating file (MaternityTracker\bin\VA.Gov.Artemis.UI.Data.pdb).
7>Updating file (MaternityTracker\bin\VA.Gov.Artemis.UI.dll).
7>Updating file (MaternityTracker\bin\VA.Gov.Artemis.UI.pdb).
7>Updating file (MaternityTracker\bin\VA.Gov.Artemis.Vista.dll).
7>Updating file (MaternityTracker\bin\VA.Gov.Artemis.Vista.pdb).
7>Updating file (MaternityTracker\Views\Outcome\AddEdit.cshtml).
7>Updating file (MaternityTracker\Views\Pregnancy\PregnancyView.cshtml).
7>Updating file (MaternityTracker\Views\Web.config).
7>Updating file (MaternityTracker\Web.config).
7>Adding ACL's for path (MaternityTracker)
7>Adding ACL's for path (MaternityTracker)
7>Publish Succeeded.
7>
========== Build: 6 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
========== Publish: 1 succeeded, 0 failed, 0 skipped ==========
|
```

◄

Web Publish Activity   Error List ...   Output   Find Results 1

▱ Publish succeeded

7. On the IIS Server, click on the website name created in the previous section and double click "Application Settings"
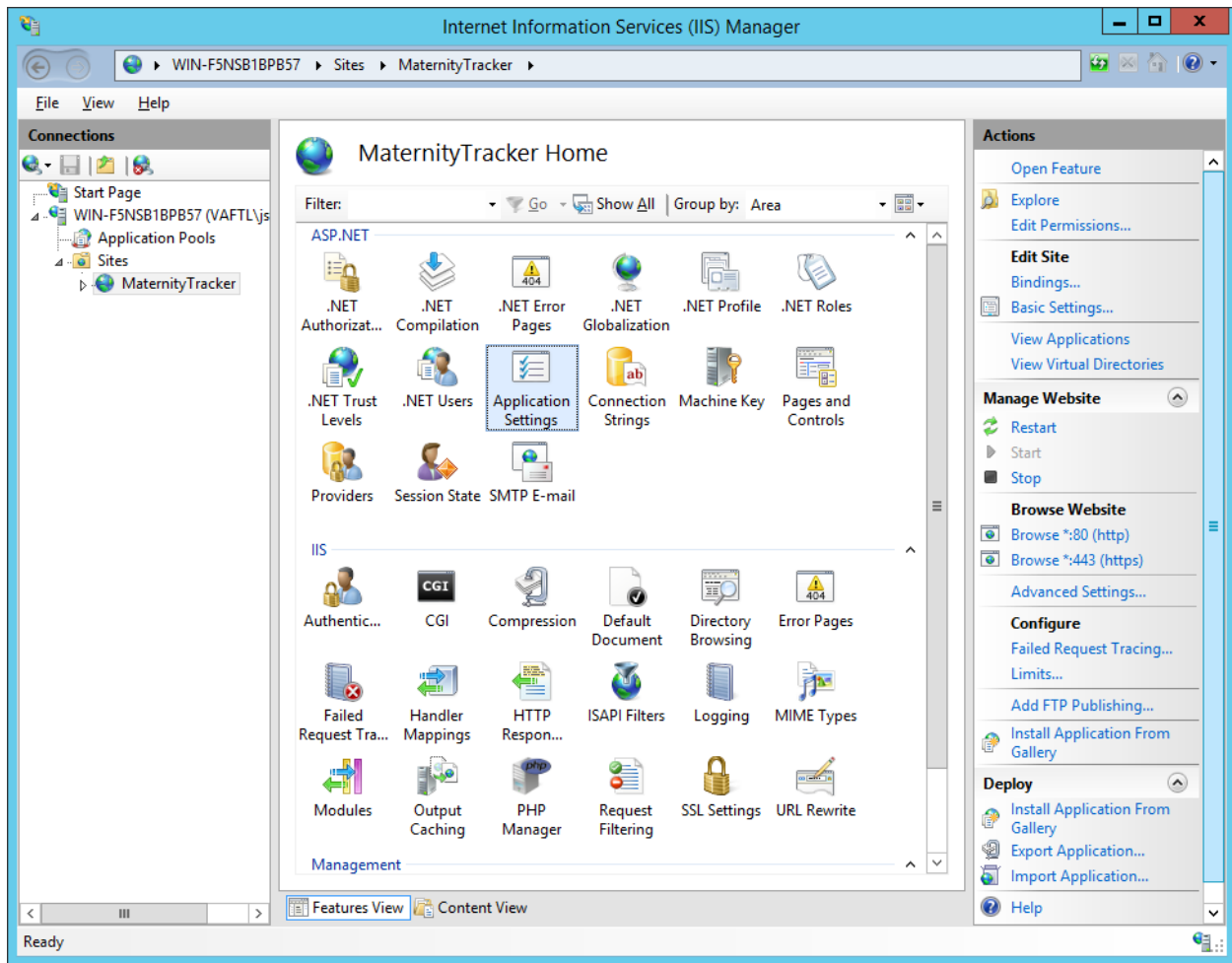
8. Enter the values of the Vista Server and RPC Port configurations in the corresponding properties.

Application Settings

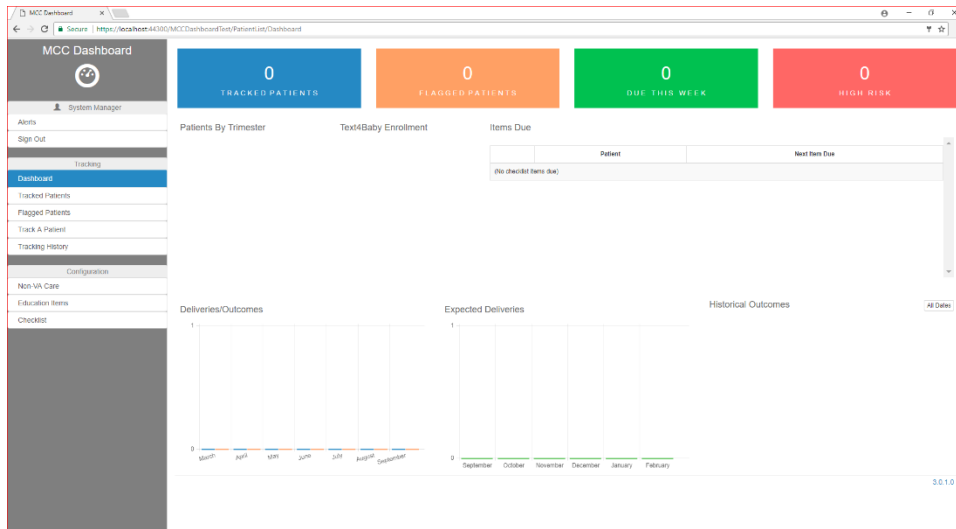Use this feature to store name and value pairs that managed code applications can use at runtime.

Group by: No Grouping

Name	Value	Entry Type	
AccessHelpLink	mailto:accesshelp@vam...	Local	
AppContext	DSIO GUI CONTEXT	Local	
cdaExportFolder		Local	
cdaManufacturerModel...	Department of Veterans ...	Local	
cdaProviderOrganization...	123-456-7890	Local	
cdaSoftwareName	Maternity Care Coordin...	Local	
ClientValidationEnabled	false	Local	
PreserveLoginUrl	true	Local	
ProductDescription	This web application wil...	Local	
Text4BabyApiApplicatio...		Local	
Text4BabyApiPassword		Local	
Text4BabyApiReferringUrl		Local	
Text4BabyApiUserName		Local	
UnobtrusiveJavaScriptEn...	false	Local	
vistaListenerPort	<VISTA LISTENER PORT>	Local	
vistaServer	<VISTA IP ADDR>	Local	
webpages:Enabled	false	Local	
webpages:Version	2.0.0.0	Local	
WelcomeMessage	Welcome to the Materni...	Local	

---

11   Login using the created users

After the users are created as discussed is Chapter 8 Users Setup, and the build is deployed as specified in Chapter 10 Deploy Maternity Tracker Dashboard to IIS, you can login in the Maternity Tracker Dashboard at the following link:

https://<ip_address_of_windows_server>/

The Dashboard should display as follows:

12   Resources

1. https://github.com/veratics/Maternity-Tracker
2. https://github.com/Veratics/Maternity-Tracker/blob/master/README.md
3. https://github.com/OSEHRA/VistA/blob/master/Documentation/README.rst#cache
4. https://www.osehra.org/content/how-setup-osehra-vista-development-virtual-machine-vm-0
5. https://github.com/OSEHRA/VistA/blob/master/Documentation/InstallCache.rst
6. https://github.com/OSEHRA/VistA/blob/master/Documentation/ObtainingVistAMCode.rst
7. https://github.com/OSEHRA/VistA/blob/master/Documentation/PrepareMComponents.rst
8. https://github.com/OSEHRA/VistA/blob/master/Documentation/ImportCache.rst
9. https://github.com/OSEHRA/VistA/blob/master/Documentation/ConfigureCache.rst
10. http://www.hardhats.org/projects/New/InitializeVistA.html
11. http://www.hardhats.org/projects/Old/VistA_Install/CPRSStart12.html
12. http://www.hardhats.org/projects/VistA_Install/Vista_Install.html
13. http://www.vistapedia.com/index.php/VISTA_XWB_Broker_Troubleshooting
14. https://download.intersystems.com/download/download.csp

13   Appendix

13.1 Commands frequently used

`S DUZ=.5` – S is a shortcut for SET, DUZ means user number; .5 is a user that is always present on VistA systems.

`D ^XUP` – D is a shortcut for DO, ^XUP is the name of the routine. ^XUP is the programmer mode menu runner.

`D Q^DI` – Do starting from Label Q in Routine DI. Q^DI is how to enter Fileman.

`D ^ZTMGRSET` – Defines VistA global variables and saves system wide M routines.

`D ^DINIT` – Initialize Fileman to set your domain name and number and Operating System

`D ^ZUSET` – Choose the correct version of ZU

`D ^ZTMB` – Start Taskman

`D CHECK^XWBTCPMT` – Check RPC Broker

`D CALL^XWBTCPMT` – Call RPC Broker

`D STRT^XWBTCP` – Start RPC Broker

`D THIS^%SS` – Display the running processes

`;` – A semicolon is the comment character. M, like C, was written to replace assembly.

13.2 VistA Text Mode Conventions

`//` – means that the preceding text is the default. If you press enter, you will accept it.

`'Replace'` – means that the existing text is long and you can edit it.

`...` – means that you will replace the entire thing;

`END` – appends to the end. You can also use ... to signify a range between two elements in the existing text. You can also enter a unique segment of the text, press enter, and at the with prompt put in what you want to replace that bit of text with. If you don't type anything in, it deletes that part of the text.

`@` – deletes an item.

^ – usually lets you quit what you are in the middle of.

^FIELD NAME – lets you jump to a field while editing other fields. You may be blocked depending on what the programmer decides you are allowed to do.

? – Short Help. Typically it tells you that you need to type a number or text.

?? – More Help. Should tell you what the field you are filling does. In the menu system, show all menus with what security keys they need.

??? – In the menu system, display help for each immediate submenu.

???? – In the menu system, display help for current menu.

<enter> key – is the main navigation key in VistA. Typing it after an entry enters that entry; typing when nothing is entered will move you forward or up, depending on the context.

Select <item> – Whenever you see select, you can select or add an item; after that, you can edit it.

Spacebar <enter> – Most of the time, VistA remembers the last entry you made for a particular field. To make the same entry again, do spacebar enter.