Project Inception

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Subject Matter Expert

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UNIFACE

Advanced Development Technology

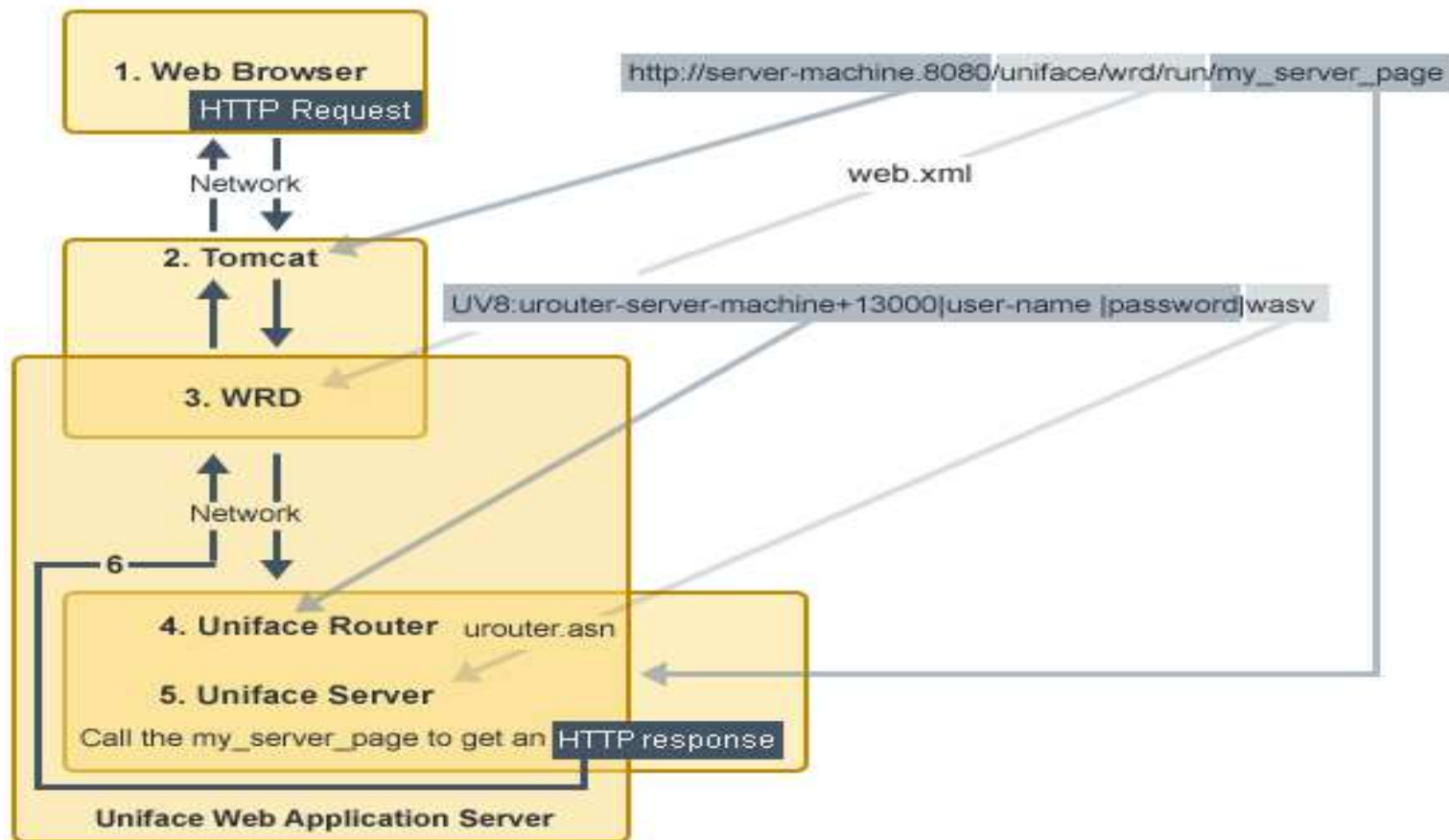# I found this cool stuff ….

So I brought up IDF and imported …

That's when I had this sinking feeling.

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Have you ever wondered ...
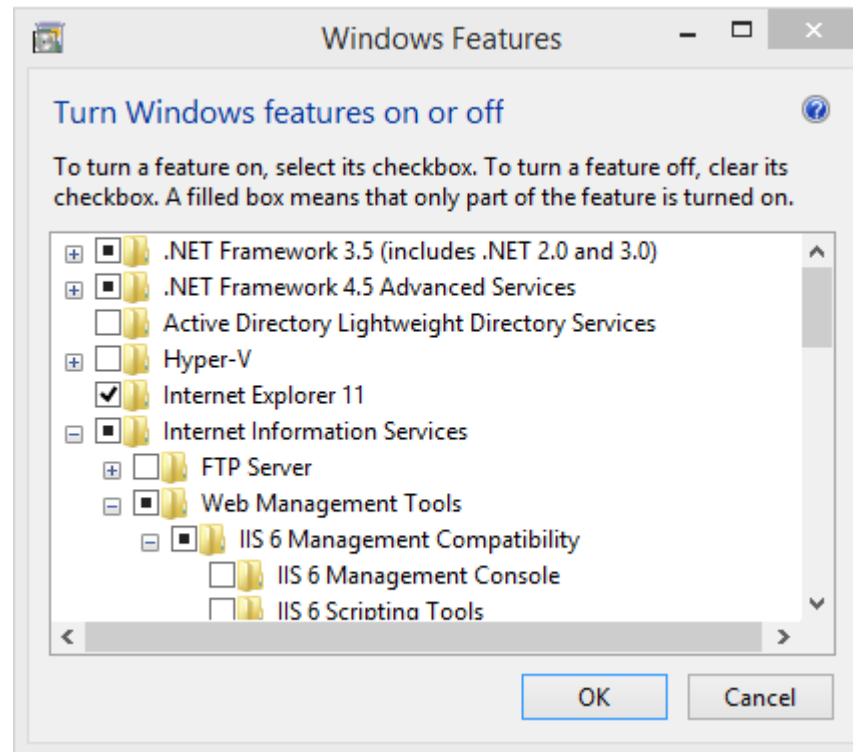
- How to quickly setup a Uniface sandbox

- How can I isolate my environment

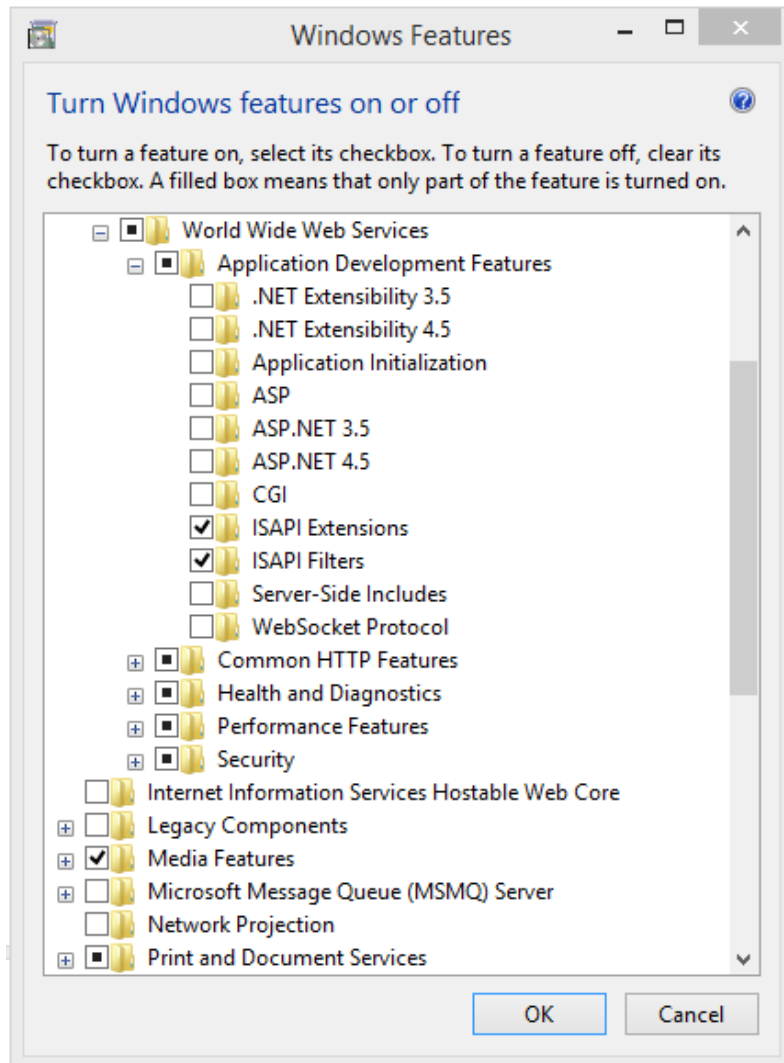- How do I prevent me from mixing samples and my corporate app

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Web Based Applications

- Tomcat / IIS

- Urouter

- UServer

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1. Web Browser
HTTP Request

Network

http://server-machine.8080/uniface/wrd/run/my_server_page

web.xml

2. Tomcat

UV8:urouter-server-machine+13000|user-name {password}wasv

3. WRD

Network

6

4. Uniface Router   urouter.asn

5. Uniface Server

Call the my_server_page to get an HTTP response

Uniface Web Application Server

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IIS Redirector

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IIS Configuration

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ISAPI_Redirector

My Environment:

Uniface 9.7.01

Windows edition

Windows 8.1 Pro

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Windows 8

System

Processor:	Intel(R) Core(TM) i7-4600U CPU @ 2.10GHz 2.69 GHz (2 processors)
Installed memory (RAM):	8.57 GB
System type:	64-bit Operating System, x64-based processor
Pen and Touch:	No Pen or Touch Input is available for this Display

From apache.org :

- tomcat-connectors-1.2.40-windows-x86_64-iis

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ISAPI_Redirector

Required Registry Entries:

Windows Registry Editor Version 5.00

[HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation]

[HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Jakarta Isapi Redirector]

[HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Jakarta Isapi Redirector\1.0]

"extension_uri"="/jakarta/isapi_redirect.dll"

"log_file"="e:\\jakarta-tomcat\\logs\\isapi.log"

"log_level"="debug"

"worker_file"="C:\\Program Files (x86)\\Uniface\\Uniface
        9.7.01\\common\\tomcat\\conf\\workers.properties"

"worker_mount_file"="C:\\Program Files (x86)\\Uniface\\Uniface
        9.7.01\\common\\tomcat\\conf\\uriworkermap.properties"

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ISAPI_Redirector

Tomcat Examples:

Under the default web site create a new virtual directory

1. Right-Click -> Add Virtual Directory

2. Alias: **/examples**

3. Physical Path: **C:\Program Files (x86)\Uniface\Uniface 9.7.01\common\tomcat\webapps\examples**

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ISAPI_Redirector

Jakarta Application

1. Right-Click -> Add Application

2. Alias : **jakarta**

3. Physical Path : **C:\Program Files (x86)\Uniface\Uniface 9.7.01\common\tomcat\bin**

Alias maps to the *extension_uri* in the registry settings

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ISAPI_Redirector Configuration

Uriworkermap.properties

```
#
# Simple uri worker map configuration file
# Check the JK Documentation of Tomcat
     for more information
#


default.worker=defworker
uniface.worker=defworker


# --- Worker mappings for Uniface ---
/uniface/*=
```

Uriworkermap.properties

```
#
# Simple uri worker map configuration file
# Check the JK Documentation of Tomcat for more information
#

default.worker=defworker
uniface.worker=defworker

# --- Worker mappings for Uniface ---
/uniface/*=defworker

# Add tomcat examples for testing
/examples/*.jsp=defworker
/examples/servlet/*=defworker
```

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ISAPI_Redirector

Workers.properties

```
#
# Simple workers configuration file
# Check the JK Documentation of Tomcat for more information
#

ps=\

# List all workers
worker.list=defworker

# Redefining the worker named defworker of type ajp13
worker.defworker.port=8083
worker.defworker.host=localhost
worker.defworker.type=ajp13
worker.defworker.lbfactor=1
# Specify the size of the open connection cache.
#worker.defworker.cachesize

# Specifies the load balance factor when used with a load balancing worker.
worker.loadbalancer.type=lb
worker.loadbalancer.balanced_workers=defworker
```

Workers.properties

```
#
# Simple workers configuration file
# Check the JK Documentation of Tomcat for more information
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ps=\

# List all workers
worker.list=defworker

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```

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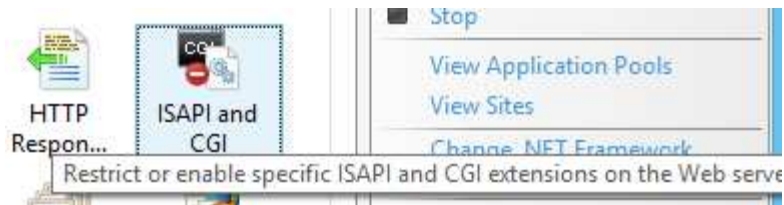U s e r   E v e n t s

ISAPI_Redirector

Where does that port come from?

C:\Program Files (x86)\Uniface\Uniface 9.7.01\common\tomcat\logs\Catalina.DATE
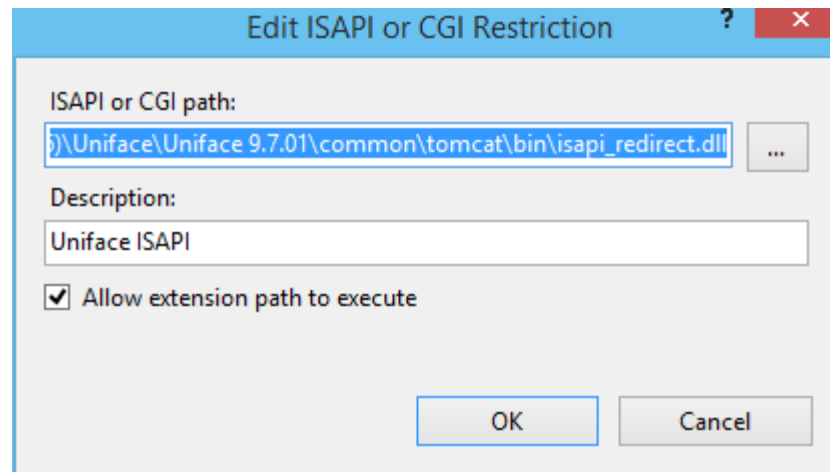Where Date = 2015-10-14

14-Oct-2015 08:09:17.927 INFO [main] org.apache.coyote.AbstractProtocol.init
    Initializing ProtocolHandler ["http-apr-8080"]

14-Oct-2015 08:09:17.943 INFO [main] org.apache.coyote.AbstractProtocol.init
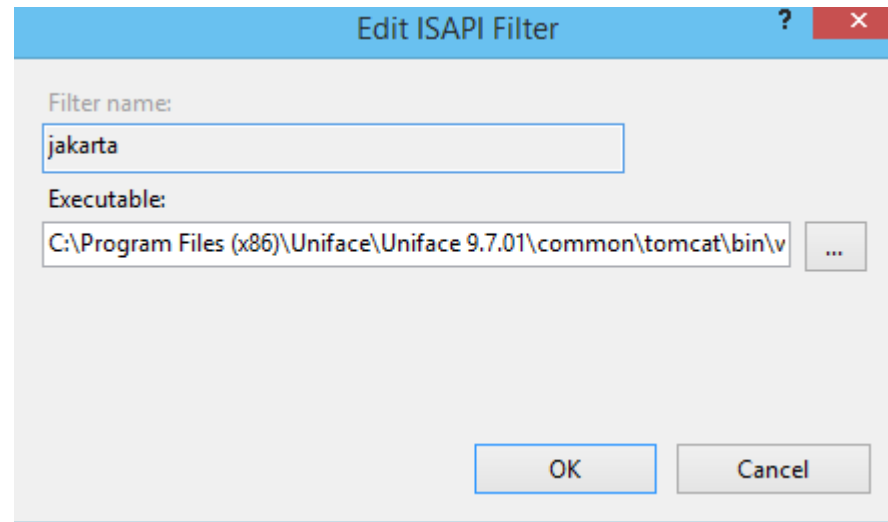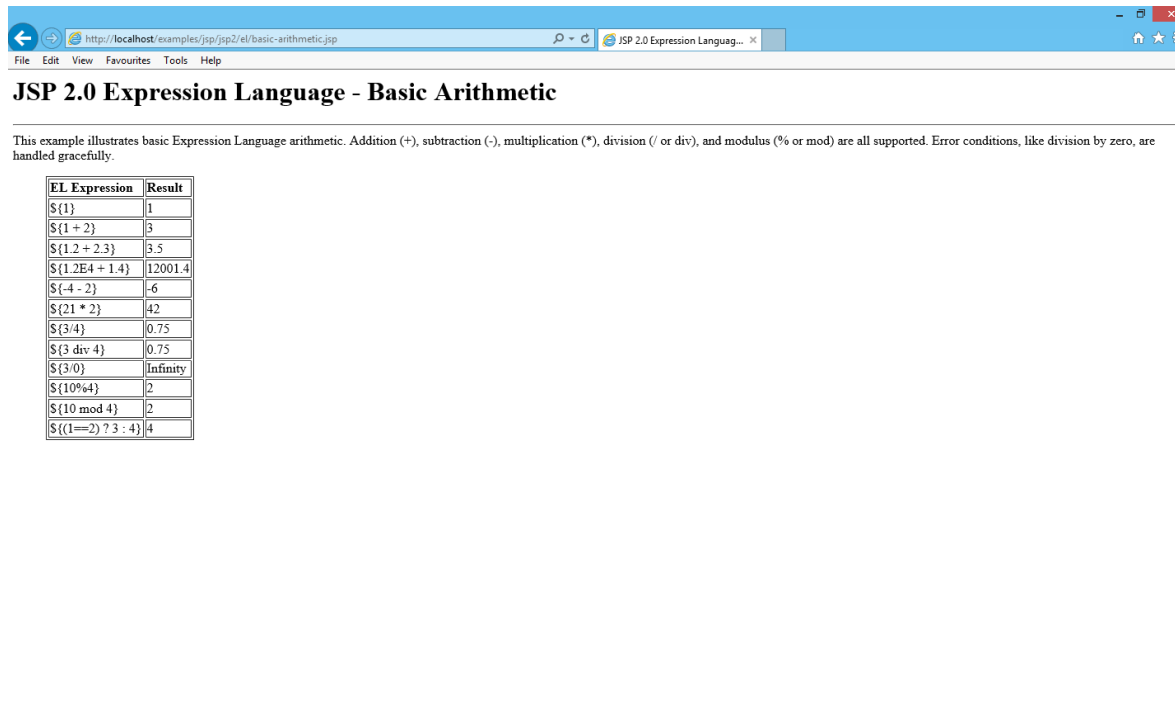   Initializing ProtocolHandler ["**ajp-apr-8083**"]

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ISAPI_Redirector

Add…

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ISAPI_Redirector

ISAPI Filters

Edit ISAPI Filter

Filter name:

jakarta

Executable:

C:\Program Files (x86)\Uniface\Uniface 9.7.01\common\tomcat\bin\v   ...

OK   Cancel

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ISAPI_Redirector

- Restart IIS

- Restart tomcat

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Now for the Uniface configuration…

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URL Mapping - So how does this work?

```
<display-name>Uniface Web Request Dispatcher</display-name>

<!-- Uniface W(eb) R(equest) D(ispatcher) Servlet -->
<servlet>
  <servlet-name>
    wrd
  </servlet-name>
  <servlet-class>
    com.compuware.uniface.urd.WRDServlet
  </servlet-class>

  <init-param>
    <param-name>TESTABLE</param-name>
    <param-value>true</param-value>
  </init-param>
  <init-param>
    <param-name>USERUNPREFIX</param-name>
    <param-value>false</param-value>
  </init-param>
  <init-param>
    <param-name>MIDDLEWARE</param-name>

    <param-value>UV8:localhost+13001|userver|userver|wasv</param-value>
  </init-param>

  <!-- The settings ERRORDIR, RESOURCEDIR and WEBAPPURL are made optional -->
  <!-- Do not use set them in a stand-alone web application -->
</servlet>
```

```
<servlet-mapping>
  <servlet-name>wrd</servlet-name>
  <url-pattern>/wrd/*</url-pattern>
</servlet-mapping>
```

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We are the files?

Tomcat Configuration:

C:\Program Files (x86)\Uniface\Uniface 9.7.01\uniface\webapps\uniface\WEB-INF\web.xml

urouter.asn:

C:\Program Files (x86)\Uniface\Uniface 9.7.01\common\adm\urouter.asn

wasv.asn

C:\Program Files (x86)\Uniface\Uniface 9.7.01\uniface\adm\wasv.asn

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Urouter.asn

wasv = "C:\Program Files (x86)\Uniface\Uniface 9.7.01\common\bin\userver.exe"

/dir="E:\DeveloperConference\project"

/adm="C:\Program Files (x86)\Uniface\Uniface 9.7.01\uniface\adm"

/asn=wasv.asn

Remember to stop/re-start Urouter

- Net stop ""

- Net start ""

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What about the Developer?

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Uniface Developer

idf.cmd

"C:\Program Files (x86)\Uniface\Uniface 9.7.01\common\bin\idf.exe"
    /dir=e:\DeveloperConference\project
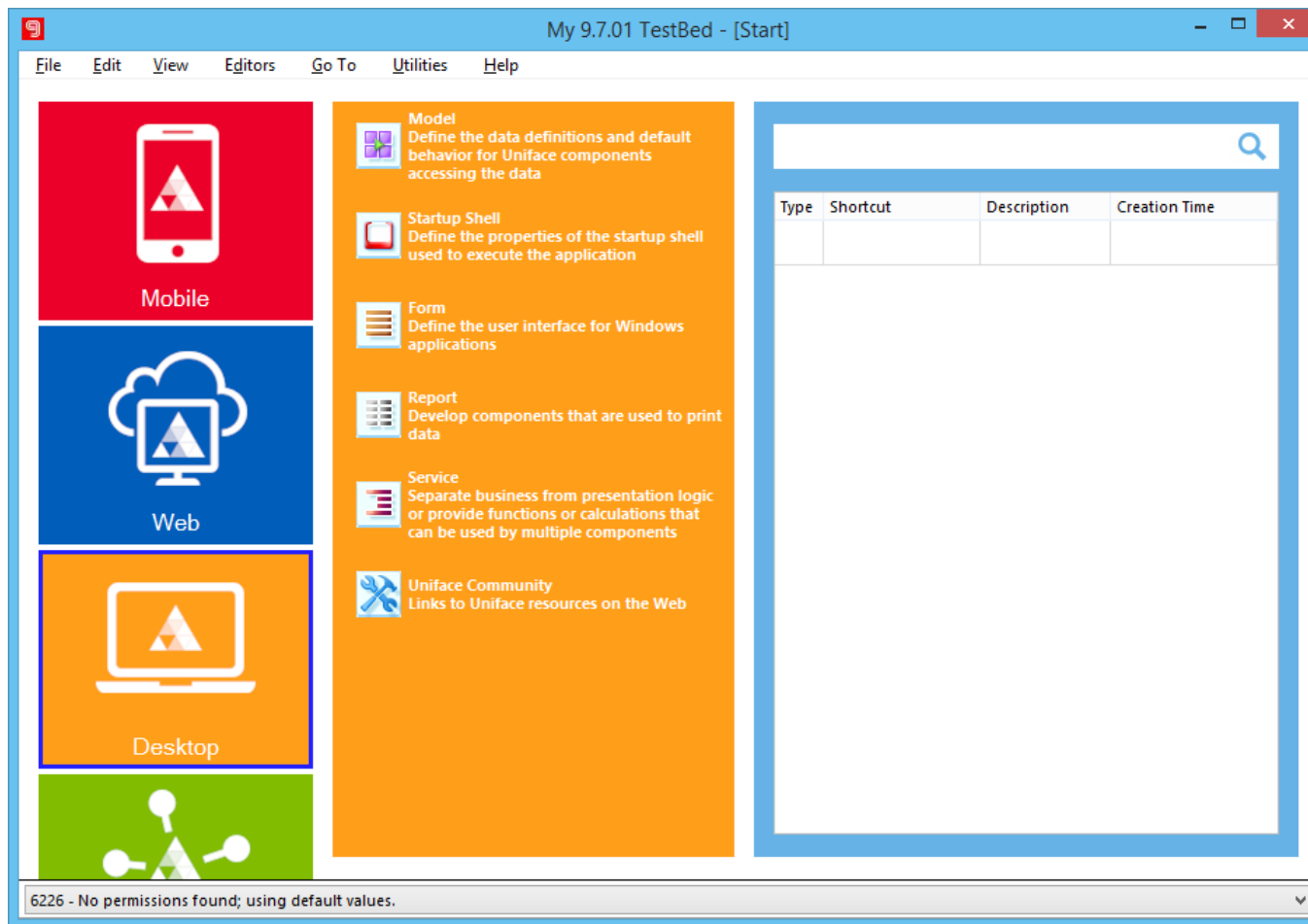   /ini=e:\DeveloperConference\project\usys.ini %1 %2 %3 %4

Localize USYS.INI

Localize IDF.ASN

Localize $DBMS/$DBMS_DEF

Set IDFTITLE

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Now I know what environment I am running

Drawbacks

- You need to maintain USYS.ini
  - 9.6 -> 9.7
- Other changes made globally will not be reflected/inherited
- System UROUTER.ASN needs to be changed.

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