**Domain\Capability:**

BizTalk\Business Function\Orchestrations

The BizTalk capability is used as an integration layer connecting Workflow, Rules and other consumers. BizTalk delivers orchestrations as well as other types of solutions. BizTalk also supports other ‘non’ Growth Platform solutions.

**Development environment(s)**

Developers develop BizTalk 2006 solutions using Visual Studio 2005 on Windows Server 2003

Developers develop BizTalk 2010 solutions using Visual Studio 2010 on Windows Server 2008

*Note: All BizTalk Developers do their development work on virtual servers. Each developer has a virtual server for BizTalk 2006 work and another for BizTalk 2010.*

**BizTalk Requests**

All BizTalk\orchestration requests come in thru an intake process. They can be updates or request for new orchestrations. We review all requests and usually have a walkthrough with the requestor and other areas that are involved. There will be a Quality Center ticket for each request. The requestors can be Project Leader’s, other Domain Developers\Technical Leads, Architects and several others. All requests are stored on Sharepoint and grouped by Release.

**BizTalk Inventory**

The current inventory of the BizTalk orchestrations can be generated at any time using our BizTalk SQL Server query tools. It will always be up to date as it runs the query on demand. I am including a spreadsheet containing orchestration names, SendPorts, ReceivePorts, Bindings, etc.

**What types of components are created and deployed?**

BizTalk Orchestrations, Pipelines, Common Services for logging, exception handling, web service references, maps (transforms), Schemas, XSLT, config files, binding files

**How is your source code managed?**

TFS with Versioning

BizTalk TFS link http://unumtfsprod:8080/tfs/BusinessFunction

**Build & Deploy**

BizTalk uses the Unum internal ‘Automated Build’ process to build the source code and to create the .msi and.bat files used deployment.

Each orchestration has a build manifest that defines the source code to use, TFS project names, branch name, dependencies that need to be compiled if there is a dependency.

The ‘build’ of source code is done via the Internal Automated Build Process UI. When Developers are ready to compile and deploy, they initiate the build.

**What types of files are used for deployment?**

.msi, .bat, .xml, config files

**High level steps to the ‘build and deploy’ process**

Step 1 Build the code

Step 2 Run Storm utility to create bat files for deploying and creation of logging files

Step 3 Preparing the BAT files

Step 4 Create deployment instructions and Binding information

Step 5 Config files

Step 6 Prepare for deployment (Copy the files to the staging area)

Step 7 Deploy

Step 8 Validation

Step 9 Other (Updating of Quality Center tickets)

**Deployment Times – pain point**

The BizTalk deployments are very slow and time-consuming. This has been a sore spot to everyone involved since implementing BizTalk initially. We have had Microsoft on-site engineer several times. Many changes were made but overall it has remained painfully slow. A BizTalk developer will be assigned to be the deployment point. This is the same for our infrastructure engineer that actually does the physical deployment for server from UAT up.

So, you can imagine the testers waiting for this to complete and our engineer and developer are tied up both when creating all the deployment artifacts and during the implementation.

Production deployments can last over 20+ hours.

**Server Environment**

BizTalk has a several dedicated servers that host BizTalk **only**. We are in the process of building and establishing a strategy for the BizTalk 2010 conversion. At this time we have both Windows Server 2003 and Windows Server 2008 supporting corresponding BizTalk 2006 and BizTalk 2010 environments. Copies are provided but they are maintained in Sharepoint.

**Database(s)**

The BizTalk’s own database (Management, Tracking, etc.) are hosted on other servers. This is provided on the Server Inventory included.

We have developed an internal database (Pipeline database) for capturing requests in and out from Workflow. This is on the BizTalk database server listed above.

**BizTalk Adapters** *(infrastructure and connectivity)*

FILE

FTP

SOAP

WCF-Custom

WMQ (MQSC)

SQL

Common BizTalk Shared applications that support different services

*Example: in the Common.Services application, we have shared web services that all the other applications can use for other BizTalk application needs. Same with Logging, etc.*

Unum.BusinessFunction.Common.Services

Unum.BusinessFunction.Common.Logging

UnumProvident.BusinessFunction.Common.ExceptionLogging

UnumProvident.BusinessFunction.Common.IProcess.ExceptionLogging

UnumProvident.BusinessFunction.Common.Potency

*UnumProvident*.BusinessFunction.Common.Services

**Can you provide any dependencies that your components have?**

There are hundreds of BizTalk orchestrations and they all have dependencies. We try to limit some by using common components for the BizTalk orchestrations to reference. But we have a very large number of dependencies. There are several types of **dependencies**.

*Some samples*

BizTalk Shared applications that are referenced by other BizTalk Applications

Orchestrations references within the development of each orchestration

Orchestration dependencies on other orchestration dependencies

Orchestration references to other .net services

Orchestrations and associated SendPorts, ReceivePorts…

Other systems that are dependent on our services

*Additional dependencies can be identified by running customized queries*

**Are there any database scripts or other changes needed?**

No. It is not common to have any BizTalk deployment requiring and database scripts\changes.

**Are there any config files you deploy?**

We have several BizTalk config files; they are in TFS

**Post deployment activities:**

Deployments should be followed with reviewing of ALL deployment logs and updating of Quality Center or TSRM tickets.

**Required Third Party Applications**

No

**Internal Applications** (i.e. Unum-developed)

**Enterprise Components** such as: Enterprise Logging

**Storm utility** to create bat files that will execute the import\install of the BizTalk orchestrations and includes commands for logging throughout the deployment

Import\_x-xx-xxxx.bat

Install\_x-xx-xxxx.bat

**External Applications:** No

**Links**

BizTalk 2006 Server *(provided in this folder, but the living document is located below)*

<http://teamspace/sites/BizTalk/Shared%20Documents/BizTalkServers.xls>

BizTalk 2010 Server *(provided in this folder, but the living document is located below)*

<http://teamspace/sites/BizTalk/Shared%20Documents/BizTalk2010%20information/BizTalk2010%20Servers.xls>