BizTalk Server 2006 R2

Objectives
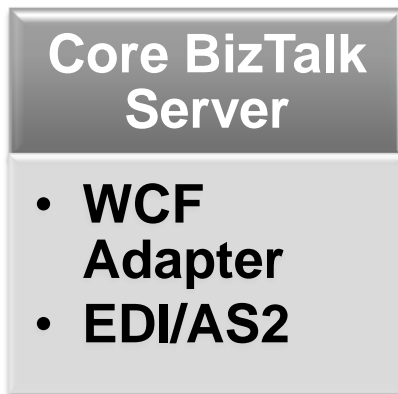
Overview of R2 feature set

R2 Installation

R2 Configuration
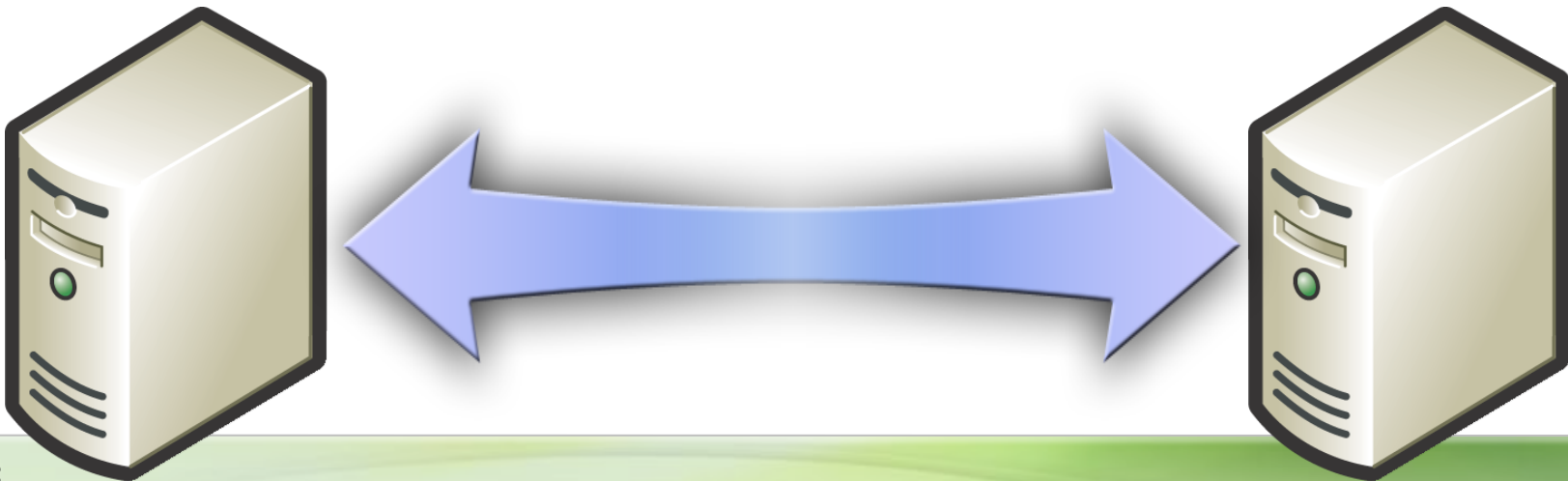
R2 Feature set

- **WCF Adapter**
- **EDI/AS2 Infrastructure**
- **WCF LOB Adapters**
- **WCF LOB Adapter Framework SDK**
- **BAM Interceptors for WCF/WF**
- **BizTalk RFID**

Core BizTalk Server	WCF LOB Adapter	BAM	BizTalk RFID
• **WCF Adapter** • **EDI/AS2**	• **Adapters** • **SDK**	• **WF** • **WCF**	• **Providers** • **Processing**

Windows Communication Foundation

- **WCF is Microsoft's distributed development technology**
  - A way to bring COM+/MSMQ/Web Services/.NET Remoting functionality together with one programming model
  - Encourages Service Oriented principles
  - Includes implementations of current WS-* specifications to encourage interoperability
  - If(DeveloperTask==Communication&&OS==Windows)
  - Open extensible architecture

WCF Adapter

- **Provides integration between Windows Communication Foundation and BizTalk Server**
- **Implementation**
  - Multiple Adapters - one for each appropriate OOB WCF Binding
  - Custom adapter for unknown binding
- **Similar to SOAP adapter in 2004/2006 (although WCF adapter can run in-process)**
  - Integrates with new WS-* standards
  - New protocols (TCP, NamedPipes, MSMQ)
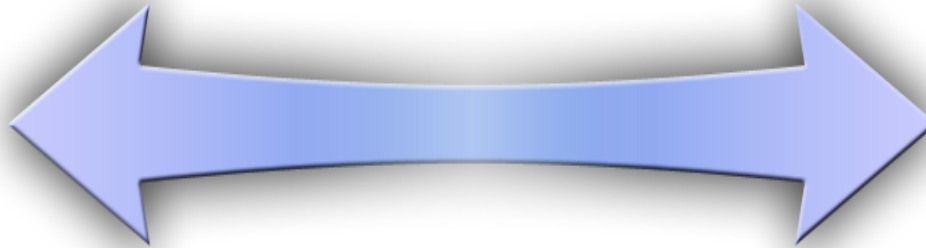 - Includes publishing and consuming wizards

WCF Line of Business Adapter Pack

- **LOB Adapters built on a new framework**
  - Adapter != BizTalk Adapter
  - Adapter == Adapter pattern to LOB based system
- **Custom WCF binding**
- **Dynamic metadata publishing**
- **V1 contains adapters for**
  - SAP, Oracle, Siebel, and TIBCO
  - More to come later
- **Can plug into BizTalk Server**
  - Bootstrapped by WCF Adapter (Custom binding)
- **Will ship after R2 as a separate SKU**
  - Not a free download
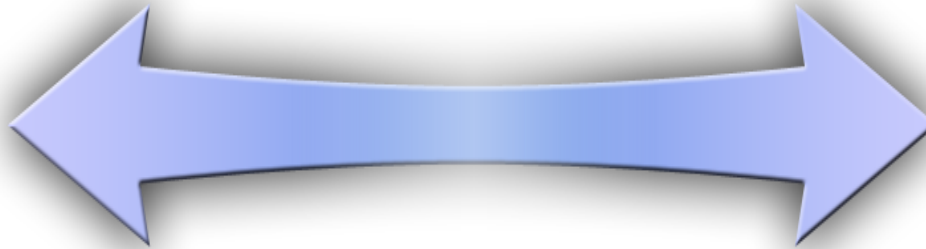 - Included in BizTalk Server SKU

WCF LOB Adapter Architecture

WCF Line of Business Adapter SDK

- **The framework for building "Adapters" to LOB applications**
  - Custom applications or even databases
  - Same framework as used by Adapter Pack
- **Builds on top of WCF channel infrastructure**
  - A way to build WCF Channel for connecting to applications not protocols
- **Can plug into BizTalk using WCF-Custom adapter**
- **Do not confuse with WCF adapter**
  - Totally separate functionality and code
  - Uses WCF Adapter to bootstrap into BizTalk Server
  - Can be used by any WCF enabled application
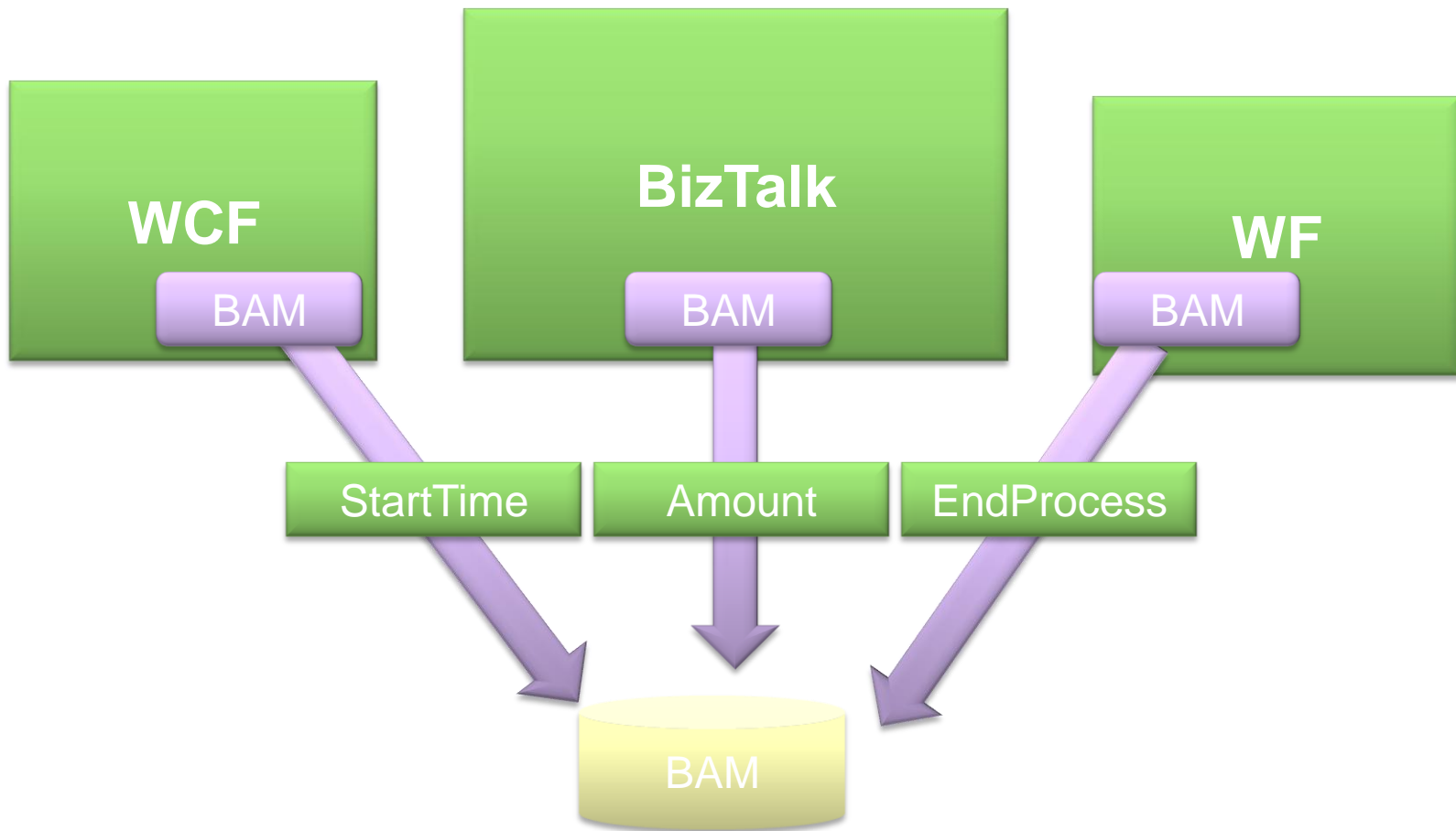- **WCF LOB Adapter SDK is free download**

EDI

- **Comprehensive EDI functionality**
  - Support for both X12 and EDIFACT
  - Supplants HIPAA accelerator
  - Over 8000 EDI schemas
  - EDI/AS2 Receive pipelines
  - Party resolution
  - Acknowledgements
  - Reporting capabilities (BAM based)
- **Drummond Group certified AS2 (HTTP EDIINT)**
- **Implementation**
  - Pipeline based – no Adapters
  - Heavily reliant on the BizTalk Party system

BAM Interceptors for WF/WCF

- **Two new interceptors**
  - Windows Workflow Foundation
  - Windows Communication Foundation
- **No extra licensing cost to place interceptors on additional machines**
  - One licensed BizTalk Server is necessary
- **No code interceptors**
  - Configure the runtime environment
  - Configure the interceptor
- **Enables declarative end-to-end business level tracking**

BAM interception with R2

ActivityId	StartTime	Amount	EndTime
Af22f4e11272	1/9/2007 3:50:34 AM	255.55	1/9/2007 3:50:34 AM

pluralsight
see what you can learn

BizTalk RFID

- **An open platform for building RFID based solutions**
- **A standalone product (BizTalk as a generic name)**
  - Not dependent on any part of BizTalk Server 2006
  - Includes Rules Engine component
  - Various methods to connect to BizTalk Server
  - Can run on Server or client OS (XP, Vista)
- **Think of BizTalk RFID as being on the edges of the enterprise**
  - Connecting to BizTalk Server in the middle
  - About connecting physical objects
- **No direct way OOB to connect to BizTalk Server**
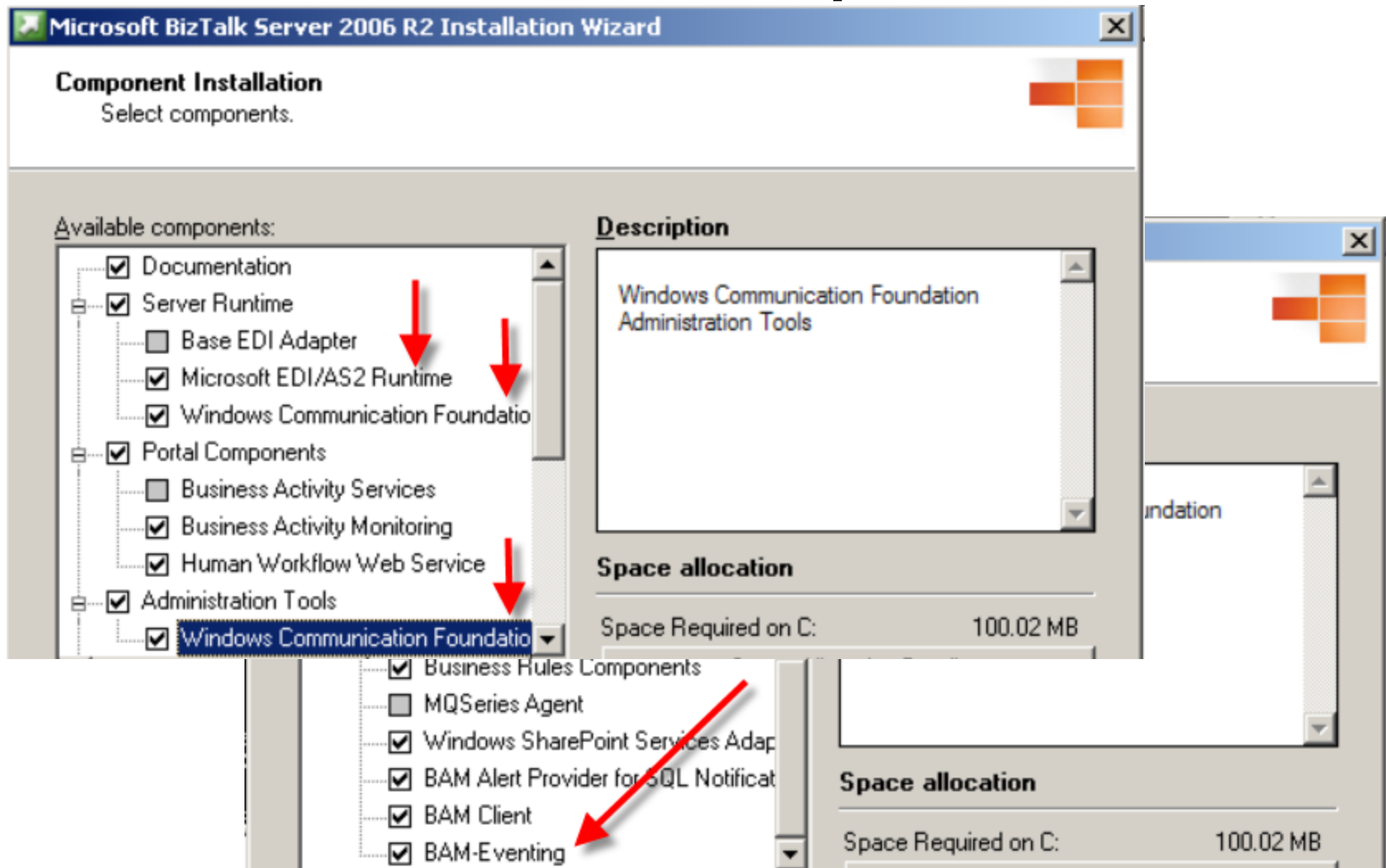 - SDK samples for WCF connection and SQL Adapter

Installing BizTalk R2 Core

- **Same installation as BizTalk Server 2006**
- **Must run install twice if upgrading**
  - Once to upgrade existing features
  - Once to add new features
- **New optional prerequisite**
  - .NET 3.0
- **Separate install for**
  - BizTalk RFID
  - WCF LOB Adapters and Adapter framework

New installation choices

- **R2 installation allows selection of new features**
  - WCF Adapters
  - EDI/AS2
    - Base EDI Adapter is grayed out
  - WCF Tools (Adapter wizard)
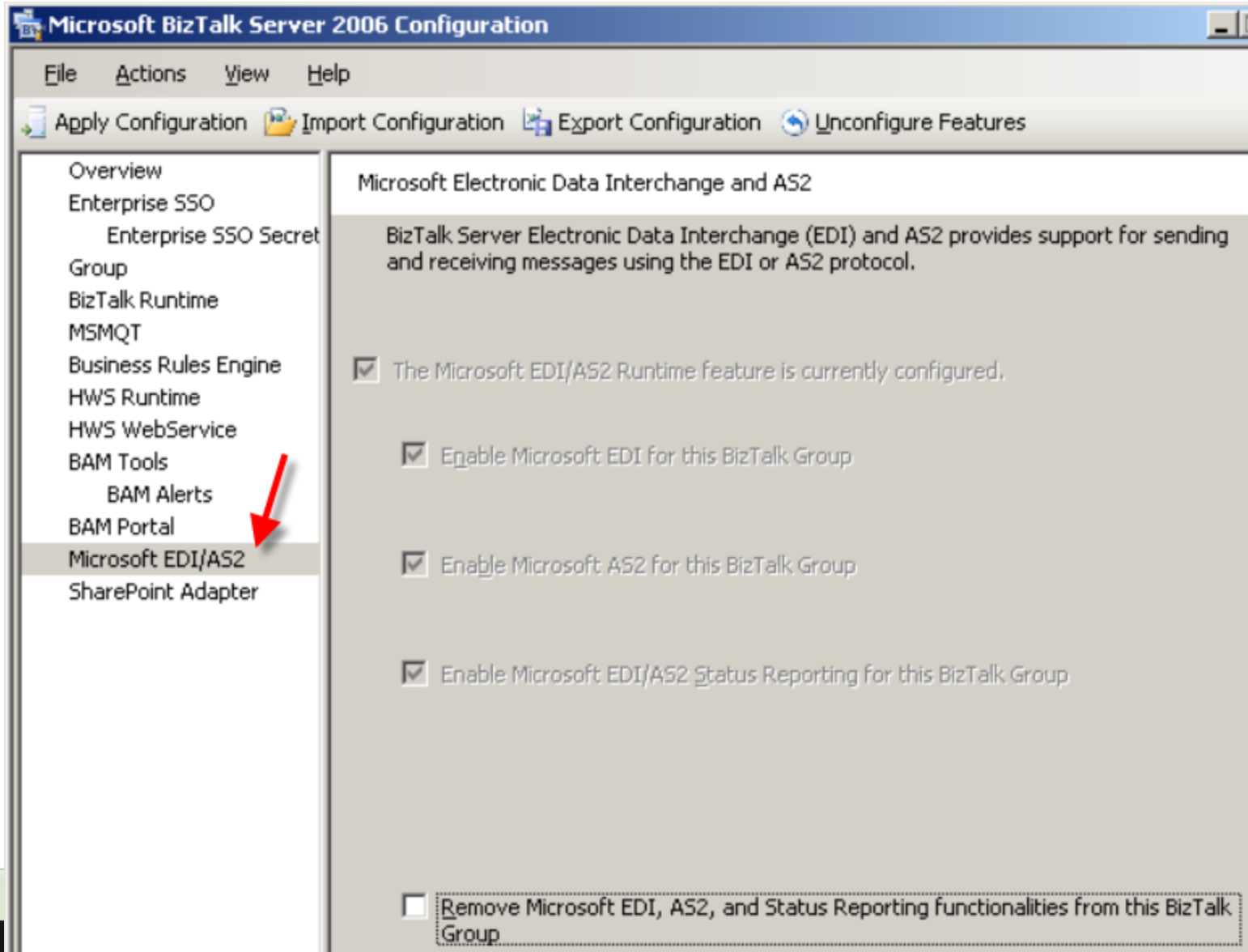 - BAM Interceptors

R2 Setup

Configuration

- **Same configuration tool as base 2006**
- **Additional elements for new features**
  - EDI
- **All other features are auto-configured**
  - WCF Adapter
  - BAM Interceptor

EDI Config

Summary

- **BizTalk Server 2006 R2 provides enhancements that**
  - Allows you to adopt WCF as the underlying technology for your services
  - Enables end-to-end instrumentation through BAM interceptors
  - Gives you full EDI/AS2 support
- **The WCF Line of Business Adapter pack and SDK allow access to LOB applications (commercial or custom) through WCF**
- **BizTalk RFID is a product that enables RFID to become part of your software processes**