Positioning BizTalk Adapter Pack over Previous BizTalk Server Adapters and over Previous ADO.NET Providers

November 2008

Author

Suresh Natarajan, Senior Program Manager Lead, Microsoft

Stefan Korn, Premier Field Engineer, Microsoft

Copyright

The information contained in this document represents the current view of Microsoft Corporation on the issues discussed as of the date of publication. Because Microsoft must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information presented after the date of publication.

This White Paper is for informational purposes only. MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE INFORMATION IN THIS DOCUMENT.

Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation.

Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

Unless otherwise noted, the example companies, organizations, products, domain names, e-mail addresses, logos, people, places and events depicted herein are fictitious, and no association with any real company, organization, product, domain name, e-mail address, logo, person, place or event is intended or should be inferred.

© 2008 Microsoft Corporation. All rights reserved.

Microsoft, BizTalk, Outlook, PowerPoint, SharePoint, Visual Studio, Windows, and other Microsoft products and services mentioned herein as well as their respective logos are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

 SAP, R/3, mySAP, mySAP.com, xApps, xApp, SAP NetWeaver, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

Content

[Abstract 5](#_Toc215300335)

[BizTalk Server Adapters 5](#_Toc215300336)

[BizTalk Adapter Pack 5](#_Toc215300337)

[ADO.NET Providers 6](#_Toc215300338)

[Feature Enhancements in the BizTalk Adapter Pack 6](#_Toc215300339)

[References 7](#_Toc215300340)

[Conclusion 7](#_Toc215300341)

[Bio 7](#_Toc215300342)

**Applies to**

Microsoft® BizTalk® Server 2009

For additional information, see [***Q&A: What’s Next for BizTalk Server***](http://www.microsoft.com/presspass/features/2008/sep08/09-05BizTalk.mspx)**1**available in PressPass - Information for Journalists.

Microsoft BizTalk Server 2006 R2

<http://www.microsoft.com/biztalk/en/us/default.aspx>

Microsoft BizTalk Adapter Pack

<http://www.microsoft.com/biztalk/en/us/adapter-pack.aspx>

Windows Communication Foundation (WCF)

<http://msdn.microsoft.com/en-us/library/ms735119.aspx>

Microsoft Windows Communication Foundation (WCF) Line of Business (LOB) Adapter SDK (WCF LOB Adapter SDK)

<http://www.microsoft.com/downloads/details.aspx?FamilyId=0F8007D7-F0C9-4169-8B9C-BA55F8F4C153&displaylang=en>

**Keywords**

BizTalk Server 2009, BizTalk Server 2006 R2, Windows Communication Foundation (WCF), SAP NetWeaver, SAP NetWeaver ECC, Microsoft SQL Server, Visual Studio, Microsoft .NET, BizTalk Adapter Pack

**Audience**

IT Management, Technical Architects, Technical Consultants, Developers

**Contact**

This document is provided to you by Microsoft Corporation. Please check the Microsoft BizTalk Adapter Pack documentation on MSDN Library for updated content or additional information at: <http://msdn.microsoft.com/en-us/library/bb927658.aspx> or at: <http://msdn.microsoft.com/en-us/biztalk/default.aspx>

**1*Q&A: What’s Next for BizTalk Server***

[**http://www.microsoft.com/presspass/features/2008/sep08/09-05BizTalk.mspx**](http://www.microsoft.com/presspass/features/2008/sep08/09-05BizTalk.mspx)

# Abstract

Microsoft® delivers software solutions to enable a flexible integration and application infrastructure. The area of integration is of particular importance and relevance today. Typically connecting to heterogeneous and Line of Business (LOB) systems has become an important task for many customers. As a result this most often increased development costs and application complexity.

In the next sections we give an overview of the various integration components. The objective is to explain a unified and open approach on the technology of Microsoft Windows Communication Foundation (WCF) programming model.

# BizTalk Server Adapters

The design of Microsoft BizTalk® Server provides integrated adapters to different data sources. While this was great in the beginning of the Enterprise System Bus (ESB) world, this has changed. Typically there are customers where it is not feasible to run a full blown middleware component in order to connect heterogeneous systems and a new approach in design was taken. Read more in the BizTalk Adapter Pack section.

We recommend BizTalk Server in addition to the BizTalk Adapter Pack if your solution requires more than simple point-to-point connectivity.

**Adapters**

Today there are integrated BizTalk Server adapters for File, FTP, POP3, SMTP, MQ Series, HTTP, SOAP, WSS, just to name a few.

# BizTalk Adapter Pack

Microsoft offers a stand-alone product which is a collection of connectivity components and integrates into mission critical middleware components like BizTalk Server 2006 R2, BizTalk Server 2009 or enterprise portals like Microsoft Office SharePoint® Server. Microsoft offers a unified approach built on Windows Communication Foundation (WCF) technology which is available with the .NET Framework. Adapters are built with the WCF LOB Adapter SDK which enables customers to write custom adapters and to utilize the BizTalk Adapter Pack. This approach is much more developer friendly and cost reductive. BizTalk Adapter Pack provides rapid application development out of the box to custom .NET applications spanning connectivity to various systems and databases.

Key features:

* Windows Communication Foundation (WCF) technology
* Unified approach build on WCF LOB Adapter SDK
* Rich visual integration with Visual Studio® 2005
* Integrating with BizTalk Adapter Framework
* ADO.NET providers for SAP and Siebel: NET Framework Data Provider for mySAP Business Suite (Data Provider for SAP) and .NET Framework Data Provider for Siebel eBusiness Applications (Data Provider for Siebel)
* Growing developer community
* Code-free integration with Microsoft Office SharePoint Server, BizTalk Server, SQL Server Integration Services

# ADO.NET Providers

With the release of the .NET Framework, Microsoft introduced the concept of ADO.NET providers. The purpose of the providers is to have a unified approach for data access. In the beginning, the .NET Framework provided support for Microsoft SQL Server®, ODBC and OLEDB data sources, just to name a few.

The BizTalk Adapter Pack comes with a new set of data providers featuring support for SAP and Siebel connectivity: .NET Framework Data Provider for mySAP Business Suite (Data Provider for SAP) and .NET Framework Data Provider for Siebel eBusiness Applications (Data Provider for Siebel). It enables developers to leverage the data providers mentioned previously to connect to Line of Business (LOB) systems and data stores. Due to the ADO.NET concept this functionality is available to .NET applications, for example SQL Server 2005 Integration Services.

For additional information, see [***Using the .NET Framework Data Provider for mySAP Business Suite***](http://msdn.microsoft.com/en-us/library/cc185369.aspx)**1** available in the MSDN Library.

|  |
| --- |
| **http://i.msdn.microsoft.com/Aa560657.note(en-us,MSDN.10).gifNote**  |
| The previous .NET Framework Data Provider for SAP never reached release status and remains in unsupported preview mode. |

# Feature Enhancements in the BizTalk Adapter Pack

The BizTalk Adapter Pack provides the following feature enhancements:

* Feature improvements to address BizTalk adapter customer pain points besides achieving feature parity with the BizTalk adapters.
* Single infrastructure for connectivity. Provide uniform access to LOB systems by standardizing on the WCF and the WCF LOB Adapter SDK. Uniform access and uniform design-time experience to browse and search LOB artifacts, a uniform adapter configuration experience and a uniform programming experience.
* Programmability, by providing users the choice of programming model to interface with the LOB. This includes the WCF Channel Model, WCF Service Model, ADO.NET model, WS-\* compliant Web services model or the BizTalk model.
* LOB client decisions to invest in the right choice of the LOB client library wherever possible. This includes LOB client libraries with better supportability from the LOB companies and better feature support. The Oracle Database adapter uses ODP.NET (as opposed to the ODBC driver) and the SAP adapter uses the RFC SDK (as opposed to the SAP .NET connector).
* Reusability by building host-agnostic adapters that can be consumed from varied applications. This includes BizTalk Server 2006 R2, SharePoint Server, SSIS and custom .NET applications.
* Security and reliability. The BizTalk Adapter Pack tightly integrates with the security models provided by the individual business applications, ensuring that users have access only to data which they are permitted to see.
* Improved real-time visibility to your business data. The BizTalk Adapter Pack allows you to access valuable corporate information when and where you can use it most productively, increasing visibility and enabling faster, better informed decision making.

**1Using the .NET Framework Data Provider for mySAP Business Suite**

[**http://msdn.microsoft.com/en-us/library/cc185369.aspx**](http://msdn.microsoft.com/en-us/library/cc185369.aspx)

# References

1. Microsoft BizTalk Adapter Pack
<http://www.microsoft.com/biztalk/en/us/adapter-pack.aspx>
2. BizTalk Adapter Pack/WCF LOB Adapter SDK Poster
<http://download.microsoft.com/download/6/4/3/643401c2-406f-4b7b-b70a-ffc55675b7bd/AdapterPack_ASDK.pdf>
3. WCF LOB Adapter SDK and BizTalk Adapter Pack
<http://blogs.msdn.com/adapters/default.aspx>
4. Microsoft SAP Customer Information Center
<http://www.microsoft.com/sap>
5. Microsoft SQL Server BI
<http://www.microsoft.com/sql/solutions/bi/default.mspx>
6. SAP Help Portal
<http://help.sap.com>

# Conclusion

Microsoft is about to provide a technology to application developers to simplify development with integration components. Future products will leverage this technology as their core connectivity stack.

# Bio

Stefan Korn is a Premier Field Engineer working as a dedicated support resource at the SAP HQ based in Walldorf, Germany. He supports and takes care of integrations in regards to SAP and Microsoft components. In detail those components are Microsoft BizTalk Adapter Pack featuring Microsoft BizTalk Adapter 3.0 for mySAP Business Suite and SQL Server Integration Services leveraging the .NET Framework Data Provider for mySAP Business Suite (Data Provider for SAP).