Azure App Service **Integration**

Integration. Evolved.

Executive Summary

This roadmap explains our holistic approach to integration and the key product offerings that contribute to our integration capabilities. It details our vision and ambition as well as our strategy to address the challenges and opportunities for integration we see in the years ahead.

We would like to highlight the following points

- Continuing commitment to BizTalk Server, with our 10th release of BizTalk Server in Q4 2016.
- Expansion of our iPaaS vision to provide a comprehensive and compelling integration offering spanning both traditional and modern integration requirements. Preview refresh in January 2016 and General Availability (GA) in April 2016.
- Deliver our iPaaS offering on premises through Logic Apps on Azure Stack in preview around Q3 2016 and GA around end of the year.
- Strong roadmap and significant investments to ensure we continue to be recognized as a market leader in integration.
- The next release of Host Integration Server is planned on the same timeline as BizTalk Server below.

Timelines

We have a hugely exciting year ahead of us and have the following releases planned across cloud and on-premises.

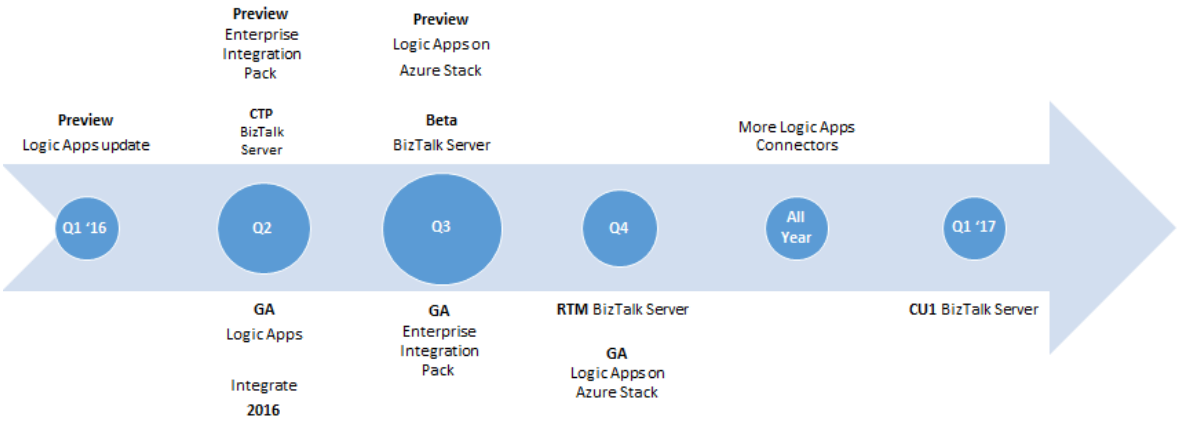

Figure 1. Overall timeline and key milestones for year ahead.

BizTalk Server "2016" key planned features

- Platform alignment – SQL 2016, Windows Server 2016, Office 2016 and latest release of Visual Studio.
- BizTalk support for SQL 2016 AlwaysOn Availability Groups both on-premises and in Azure IaaS to provide high availability (HA).
- HA production workloads supported in Azure IaaS.
- Tighter integration between BizTalk Server and API connectors to enable BizTalk Server to consume our cloud connectors such as SalesForce.Com and O365 more easily.
- Numerous enhancements including
    - Improved SFTP adapter,
    - Improved WCF NetTcpRelay adapter with SAS support
    - WCF-SAP adapter based on NCo (.NET library)
    - SHA2 support

- Host Integration Server “2016”
    - New and improved BizTalk adapters for Informix, MQ & DB2.
    - Improvements to PowerShell integration and installation and configuration

Introduction

The cloud is disrupting all aspects of information technology and one area undergoing significant change is that of integration. Traditionally, integration has been either on-premises system to system EAI (Enterprise Application Integration) or business to business (B2B), typically using EDI protocols such as EDIFACT or ANSI X12. Today, many systems (and users) that companies wish to integrate with are well beyond the corporate firewall, often SaaS-based, API-centric providers handling everything from sales leads to invoicing, email and social media. In addition, modern integration is often not from corporate computer systems at all but from devices, increasingly mobile, driving the need for a change of approach on both ends of the ‘wire’. This change is underpinned by APIs expressed in lightweight, modern, HTTP/REST-based protocols using JSON.

Industry Trends

There are a number of significant trends and drivers that are shaping the modernization of integration:

- An API economy - Increasing use of SaaS not just to augment businesses capabilities but to run core processes as well. The need to easily integrate these SaaS services is just as important. This API-centricity is benefited by API management integration capabilities.
- Increasing mobility – Ever increasing use of device-centric LOB applications driven by user expectation of always-available access to their data from anywhere.
- The Citizen Integrator - Simplification of integration in an iPaaS world is driving democratization of access to both integration tools and connecting systems to audiences capable of building the types of integration that were previously out of reach.
- Hybrid is the norm – the ability to bridge on-premises assets, IaaS hosted assets, SaaS, devices and more is a key requirement to resolve the impedance mismatches between on-prem and cloud lifecycles, hosting and security concerns and more. Increasing business expectation that such integration is simple, manageable, reliable, secure and consistent irrespective of what is being connected and where it is hosted.

Scope

Microsoft has a strong history of providing enterprise integration solutions, with the market leader, BizTalk Server, now in its 9th release. The information provided here is intended to answer the questions customers have on what the future of integration means for the future of Microsoft’s product offerings. This document covers our BizTalk Server, BizTalk Services and Logic Apps (part of our Azure App Service[1]) offerings.

Our Integration Vision

Microsoft has a bold vision – ‘to empower every person and every organization on the planet to do more’. We believe this is of huge relevance when applied to the integration expectations of our customers. The historical complexity of integration acts as an inhibitor to empowerment and we are actively breaking down the barriers in new ways to provide inclusion as a primary objective. Additionally, given the trends highlighted above that we are witnessing, we see two distinct, but overlapping, areas:

Modern Integration	**Key aspects** - Step-based flows to drive automation - Ease of use as a feature

[1] https://azure.microsoft.com/services/app-service

	- SaaS and web-centricity - Affordability but with built-in reliability and scale - Inclusive approach, no code, browser-based tools - Integrated part of Azure – a complete cloud solution - Agility and innovation through bimodal IT practices **Target Audience** - Web and mobile developers
Enterprise Integration	**Key aspects** - Industry standards support, e.g. EDI, HL7, AS/2 - Virtually unlimited scale - Fully managed iPaaS - Very high reliability 99.95 SLA for mission critical workloads - Cost competitive - Marketplace of available services, components, connectors - Core capabilities, messaging, transformation, complex logic **Target Audience** - Enterprise Integration specialists

Our Rock-solid Foundation

With our new App Service offering we provide a comprehensive set of related services including Mobile Apps, API Apps and Logic Apps. But being built on Azure means that the capabilities of App Service stretch much further than this. With foundational technologies such as Azure Storage, Service Bus messaging, software-defined networking and more, we are aiming to deliver industry-leading integration capabilities that our customers can rely on to run their businesses.

Our roadmap

While the above table identifies two audiences we do not see two problems – simply different points on the integration spectrum – 'how do I get these things talking?'. The ease with which we will enable our customers to accomplish this will define the next generation of integration.

With three key integration offerings today, BizTalk Server, BizTalk Services and Logic Apps, our intention is to ensure that we help everyone:

- Move forward with us, with new capabilities and opportunities as our customers (and their customers) demand
- Reduce the complexity of building integration solutions to provide even more value
- Continue to remain on a supported integration platform
- Are able to build the same kinds of integration solutions they need to today as well as the kinds of solutions their customers demand tomorrow
- Can locate what they need where they need it – our hybrid Improve flexibility by having the capabilities where they are needed, cloud, device, on-premises, in IaaS, SaaS, etc.

In order to achieve these goals, and to drive simplification, we will converge our offerings over time, on a schedule that makes sense to our customers, the pace of the market and our own ability to deliver industry-leading capabilities without compromising the quality, reliability and performance our customers expect from us.

Figure 2 below illustrates the location and hosting flexibility we will provide across on-premises and Azure with BizTalk Server and Logic Apps. With our investments customer will be able to run workloads across our offerings where they make sense based on their requirements, not technical limitations. This offers customers the greatest choice and flexibility on what they run where.

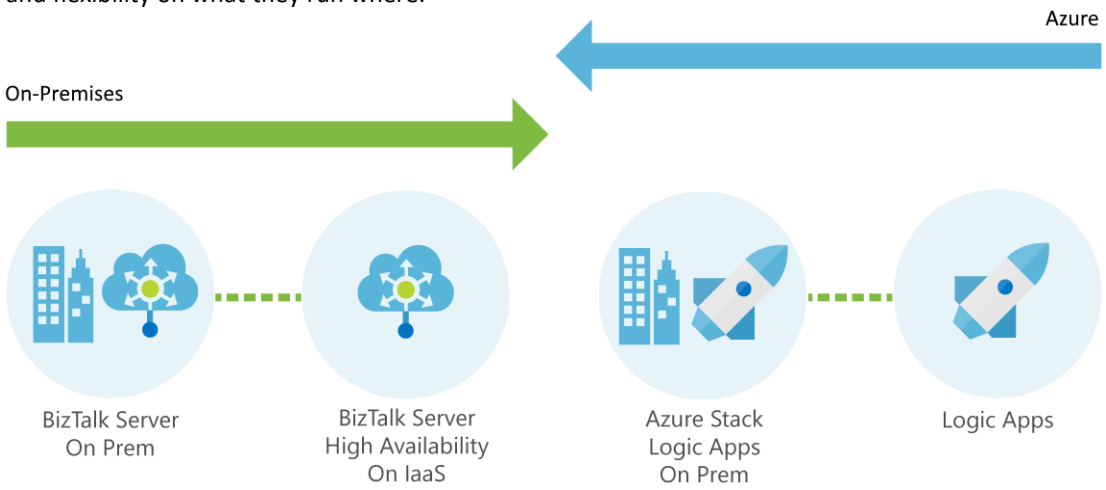

Figure 2. Location Flexibility.

We are planning to provide Logic Apps parity with BizTalk Services and indeed, much of this work is already underway. Customers should be assured with our approach that we fully intend to provide all the capabilities they have today in BizTalk Services represented in our Logic Apps and App Service offering. Therefore, for new integration solutions we recommend customers target Logic Apps for their cloud-based integration workloads.

For BizTalk Server we have already announced BizTalk Server "2016", planned to ship soon after the general availability (GA) of Windows Server 2016, SQL Server 2016, and Visual Studio 2015 – and provide support for all of these. In this 10th release we are planning to provide more options for BizTalk Server customers including the ability to run production IaaS workloads on Azure with a supported high availability (HA) capability and deeper integration with API Apps and our cloud connectors.

In additional to these features, and those already mentioned we are also planning numerous enhancements including supporting dynamic ports with ordered delivery, performance and usability improvements to the admin console, support for SAS authentication with our WCF-NetTcpRelay and more.

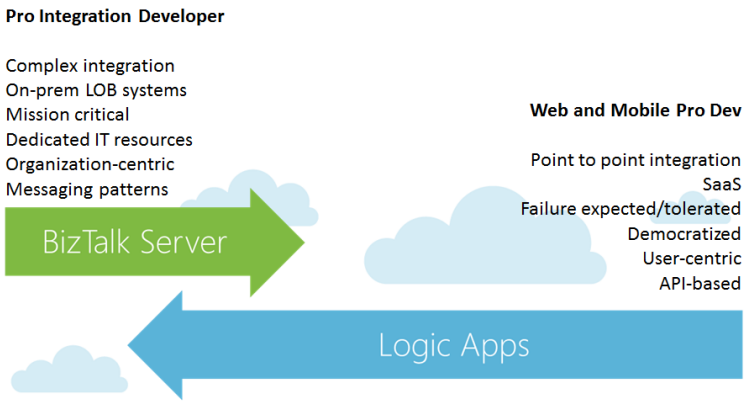

Figure 3. Product Reach.

With our already announced support for Azure Stack[2], we are ensuring that Logic Apps can be run on-premises (either in your datacenters or from a hosting provider) as well as in Azure. This will provide customers with the flexibility to run integration workloads where they make sense (e.g. on-premises system to on-premises system) or are required to do (for security, compliance or regulatory reasons). And customers will be able to do this using a single toolset and management experience across both.

Alongside our Azure Stack investments, we are actively working on adding more BizTalk Server capabilities to Logic Apps. This is best illustrated in Figure 3. Logic Apps today provides many capabilities that BizTalk Server does not,

[2] http://www.microsoft.com/server-cloud/products/azure-in-your-datacenter/

notably support for all major SaaS platforms and providers including SalesForce, O365, Dropbox, Facebook and dozens more. However, we also acknowledge BizTalk Server's rich messaging capabilities and industry verticals support that we will bring to Logic Apps to ensure that customers have the capabilities they need to implement the same kinds of integration problems they solve with BizTalk Server today with Logic Apps tomorrow.

Our holistic approach is depicted in Figure 4 which demonstrates our focus on capabilities and convergence providing customers more choice than ever before. BizTalk Server, BizTalk Services and Logic Apps are all part a single product unit in Microsoft ensuring we can take the broad approach necessary and to ensure capabilities are available where customers need them. Additionally, Azure API Management will become available as part of AppService by the end of 2016.

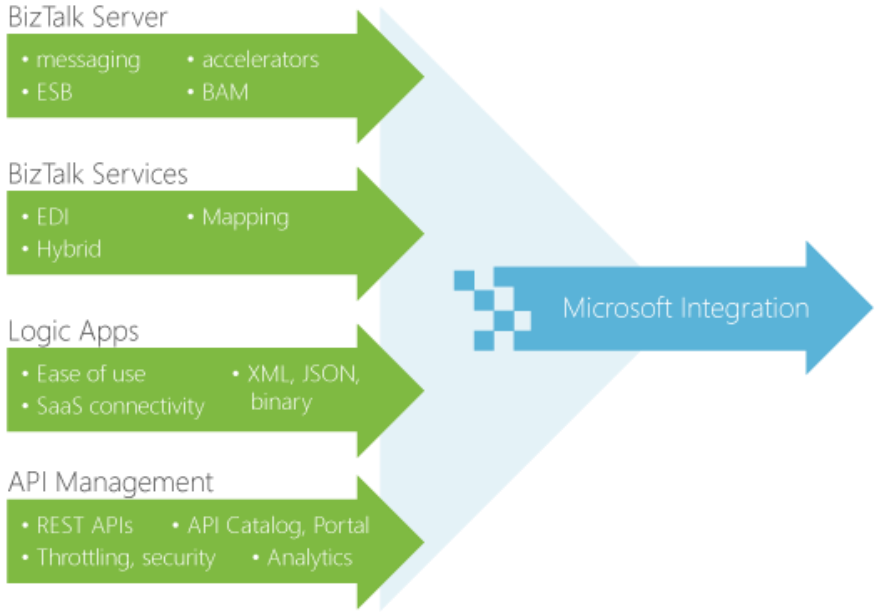

Figure 4. Converging integration capabilities.

Summary

Microsoft is deeply committed to both the integration requirements our customers have to support today as well as the future of integration. We will continue to ship new releases of BizTalk Server at the cadence our customers demand and expect to ensure they are always able to be on a supported platform from Microsoft whilst at the same time enriching and improving our iPaaS offering, Logic Apps, as part of App Service to deliver a class-leading offering with the breadth, power and usability only Microsoft can deliver.

We see a bright future for integration on the Microsoft platform where rich innovative capabilities are blended with traditional enterprise integration to raise the bar on delivering new experiences to our existing customers as well reaching key new market segments and industries.

In other words, Integration. Evolved.

If you have questions, comments or feedback, we'd love to hear it.

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References

http://www.microsoft.com/server-cloud/roadmap
http://www.microsoft.com/server-cloud/products/biztalk