Product Overview
BizTalk Server (BTS) is Microsoft’s integration and connectivity server solution. A mature product on its eighth release, BizTalk Server 2013 helps your organization more easily connect disparate systems. With more than 25 adapters and a robust messaging infrastructure, BizTalk Server provides connectivity between core systems both inside and outside your organization.
BizTalk Server 2013 provided numerous improvements in the following areas:

- Connect to the Cloud
- Run in the Cloud (IaaS)
- Improved Performance
- Simplified Development and Management
- Support for the latest Microsoft platform and industry standards

Editions Overview
BizTalk 2013 offers three editions.

<table>
<thead>
<tr>
<th>Edition</th>
<th>Primary Usage Scenario</th>
<th>Estimated Price (USD)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise</td>
<td>For customers with enterprise-level requirements for high volume, reliability, and availability</td>
<td>$10,835 per Core License</td>
</tr>
<tr>
<td>Standard</td>
<td>For organizations with moderate volume and deployment scale requirements</td>
<td>$2,485 per Core License</td>
</tr>
<tr>
<td>Branch</td>
<td>Specialty version of BizTalk Server designed for hub and spoke deployment scenarios, including RFID</td>
<td>$620 per Core License</td>
</tr>
</tbody>
</table>

*Estimated reseller pricing under the Microsoft Volume Licensing Open NL program is provided for demonstrative purposes only. Actual pricing may vary based on reseller and/or geographical location.
New Per Core Licensing Model

Effective with the 2013 version release, BizTalk Server licensing is moving from a processor-based model to a Per Core model. This model provides a more precise measurement of computing power and a more consistent licensing metric, regardless of whether your BTS solution is deployed across on-premise, virtual and/or cloud environments.

- Under the new Per Core licensing model, each server running BTS 2013 software or any of its components must be assigned an appropriate number of BTS 2013 core licenses. The number of core licenses needed depends on whether you are licensing the physical server or individual virtual operating system environments (OSEs).

- To license a physical server, you must license all the cores in the server, with a minimum of 4 core licenses required for each physical processor in the server. BTS 2013 core licenses are sold in packs of two and are priced at ¼ the cost of a BTS 2010 processor-based license.

- The actual number of core licenses required may vary by processor type, and as such, will depend on the Core Factor assigned to your applicable processor(s).

For more information on the new Per Core licensing model, including key licensing terms and definitions as well as how to use Core Factors when determining your BTS 2013 licensing needs, please download the Introduction to Per Core Licensing Volume Licensing Brief: http://www.microsoft.com/licensing/about-licensing/briefs/licensing-by-cores.aspx.

How to License Physical Environments with Core Licenses

1. License all of the physical cores on the hardware
2. Ensure a minimum of four core licenses are purchased for each physical processor. (Note that core licenses are sold in packs of two.)

<table>
<thead>
<tr>
<th>PHYSICAL CORES IN THE PROCESSOR</th>
<th>1</th>
<th>2</th>
<th>4</th>
<th>6</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE LICENSES REQUIRED</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

*This licensing example assumes a Core Factor of “1”.

Cloud-Optimized Virtualization Licensing

BizTalk Server 2013 offers expanded virtualization rights, options and benefits to provide greater flexibility when deploying in virtual environments. When deploying BTS 2013 in a virtual environment, you have the choice of licensing either individual virtual machines (VMs) as needed or to license for maximum virtualization to support highly virtualized and private cloud environments.

Individual Virtual Machines

As hardware capacity grows, it becomes more common for each instance of BTS 2013 to use only a fraction of a server’s computing power. When deploying VMs that use just a portion of a physical server, you can achieve significant savings by licensing individual VMs. Similar to licensing physical OSEs, all virtual cores (v-cores) supporting virtual OSEs (VMs) running BTS 2013 software must be licensed accordingly.
To license a VM using the Per Core model, purchase a core license for each v-core (or virtual processor, virtual CPU, or virtual thread) allocated to the VM, with a minimum of four core licenses required for each VM. Core Factors do not apply when licensing individual VMs.

Licensing individual VMs is the only virtualization licensing option available for the BTS 2013 Standard and Branch editions.

If you are running BTS 2013 in a highly virtualized environment and want to move VMs dynamically across servers to reallocate resources as needed, Microsoft permits License Mobility as an exclusive Software Assurance (SA) benefit available for all editions of BTS 2013.

How to License VMs with Core Licenses
1. License the virtual cores in each virtual machine.
2. Ensure a minimum of four core licenses are purchased for each virtual machine.

Example:

<table>
<thead>
<tr>
<th>VM1</th>
<th>VM2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="VM1" /></td>
<td><img src="image2" alt="VM2" /></td>
</tr>
<tr>
<td>VM with 4 Virtual Cores</td>
<td>VM with 6 Virtual Cores</td>
</tr>
<tr>
<td>4 Core licenses required</td>
<td>6 Core licenses required</td>
</tr>
</tbody>
</table>

High Density Virtualization
Further savings can be achieved when licensing BTS 2013 for maximum virtualization to support private cloud and other highly virtualized deployments. This is a great option when you want to take advantage of the full computing power of your physical servers and have dynamic provisioning and de-provisioning of virtual resources.

Maximum virtualization can be achieved by licensing the entire physical server (or server farm) with core licenses and covering each of those licenses with Software Assurance (SA).

Available as an SA benefit for the BizTalk Server 2013 Enterprise Edition only, this licensing option allows you to deploy BTS 2013 software in an unlimited number of OSEs (physical and/or virtual) to handle dynamic workloads and fully utilize your hardware computing capacity.

How to License Private Clouds with Core Licenses
1. License all the physical cores on the server with Enterprise Edition core licenses and cover with SA.
2. Deploy an unlimited number of VMs.

Example:

<table>
<thead>
<tr>
<th>What you License</th>
<th>What you Deploy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Cores with BTS Enterprise Edition + SA</td>
<td>Unlimited VMs (example 6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What to Buy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 BTS Enterprise Edition core licenses with SA</td>
</tr>
</tbody>
</table>

Transitioning to the New Licensing Model
In order to facilitate a smooth transition to the Per Core licensing model for current BTS 2010 users, Microsoft is offering several migration options designed to help customers who have invested in
Software Assurance to protect their current software purchases.

Moving Processor Licenses to Core Licenses

BTS 2010 is the last version of BizTalk Server software to be licensed under the Per Processor licensing model. If you have active SA coverage on your current BTS 2010 processor licenses as of April 1, 2013, you are eligible to upgrade and run the new BTS 2013 version software through the remainder of your current agreement term under processor-based use rights. You will be able to renew into core licenses upon your first subsequent SA expiration.

- BizTalk Server 2010 processor licenses with active SA are valued at the actual number of cores in use, with a minimum of four core licenses per processor.
- At the end of your current agreement term, you must perform a self-inventory of systems currently licensed for BTS 2010 with SA coverage and document the number of cores in each processor. This inventory will enable you to receive the appropriate BTS 2013 use rights moving forward and will determine the number of core licenses granted at renewal.
- You are encouraged to use the Microsoft Assessment and Planning (MAP) Toolkit, or other equivalent software, to document a record of your configuration. If you do not perform this self-inventory, you will receive the minimum core values as noted above.

<table>
<thead>
<tr>
<th>PHYSICAL CORES IN THE PROCESSOR</th>
<th>2</th>
<th>2</th>
<th>6</th>
<th>8</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>RENEW INTO CORES</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Customers with Enterprise Agreements

If you have an existing Enterprise Agreement (EA), including Enterprise Subscriptions (EAS) or Application Platform Enrollments (EAP), effective on April 1, 2013 (at the time of BTS 2013 general availability), you can continue to purchase processor-based licenses through the end of your current agreement term.

- When purchasing additional processor-based licenses, you will need to continue calculating the number of BTS licenses required base on the BTS 2010 processor use rights.
- As an EA or EAP customer, you also have the option to add core licenses to your agreements mid-term for future purchases. Please contact your authorized reseller or Microsoft account team for more information on this migration option.
Frequently Asked Licensing Questions (FAQs)

Q: What are the key licensing changes with BizTalk Server 2013?
A: Effective with this latest software release, BizTalk Server is moving from a Per Processor licensing model to a Per Core licensing model. Additionally, some use rights such as License Mobility and Unlimited Virtualization will now be offered as Software Assurance benefits only.

Q: When will these changes take effect?
A: Licensing changes will come into effect at the general availability of BizTalk 2013 on April 1, 2013.

Q: Are there any virtualization or cloud-related licensing benefits with BizTalk 2013?
A: BizTalk Server 2013 includes a variety of virtualization and cloud capabilities that will help your organization save money on licensing and retain flexibility in your deployments. You can:

- **License individual virtual machines (VMs)** and when licensing per core, buy core licenses only for the virtual cores (threads or physical cores) assigned to the VM.
- **License for high VM density** by buying Enterprise Edition core licenses with Software Assurance (SA) for all the physical cores on the server (or server farm) and deploying any number of VMs on the licensed hardware. Without SA, VM density is limited to one VM per core with Enterprise Edition.
- **License for VM mobility** across private and public clouds. License Mobility is an SA benefit. Without SA, licenses can be moved from one server to another only once every 90 days.

Q: Can you explain why Microsoft is making these licensing changes?
A: The changes to BizTalk Server licensing reflect the evolution of the industry, along with new hardware deployment practices. Internal research with hundreds of customers has shown us that organizations are comfortable with Per Core licensing and consider this licensing model to be simple and predictable. Customers have also shown great enthusiasm for Microsoft’s virtualization and cloud-friendly licensing as a way to help save money as their deployment practices evolve. With these changes, Microsoft will continue to offer industry-leading TCO to our customers.

Q: Will these licensing changes be accompanied by an increase in pricing?
A: Under the new Per Core licensing model, the net price impact to individual customers will vary based on how they deploy BizTalk Server 2013, their current capacity, and their future needs. For customers who are running BizTalk Server software on processors with four cores or less, the license cost for BizTalk Server 2013 remains consistent with BizTalk Server 2010, as core licenses are priced at one quarter the cost of a processor license. For customers running servers with higher capacity processors, licensing cost will grow with the increased power of their hardware.

Q: I have Software Assurance, will I have to pay more to upgrade to BizTalk 2013?
A: No. All BizTalk Server 2010 licenses covered by active Software Assurance will be able to upgrade to BizTalk Server 2013 at no additional cost.

Q: How do I migrate from processor licenses to core licenses? What is the migration path?
A: Licenses purchased with Software Assurance will upgrade to BizTalk Server 2013 at no additional cost. EA/EAP customers can continue buying processor licenses until the first renewal after April 1, 2013. At renewal, the number of core licenses granted will be equal to the number of cores in use by the processor-licensed software, or a minimum of 4 cores per processor.

Q: How will BizTalk processor licenses with Software Assurance be exchanged for BizTalk 2013 core licenses? How will I (and Microsoft) determine the number of cores that I am owed?
A: You should perform a “self-inventory” of your environment at the end of your Software Assurance term. This inventory will provide the basis for your long-term BizTalk Server 2013 use rights and eligibility for renewal into core licenses. We will provide access to the Microsoft Assessment and Planning (MAP) Toolkit as one way to help track and document deployments. This tool can help you plan the transition from processor licenses to core licenses by counting both processors and cores across your deployments. If you are not able to document your BizTalk Server deployments, then your processors will be worth the standard conversion ratio by edition. We encourage you to work with your Microsoft or Partner representative to determine an optimal transition plan.