

# BIZTALK 360

## CASE STUDY

**Microsoft Supply Chain team is monitoring 16 BizTalk Server groups that handle over 250 million messages per month via BizTalk 360**



The Supply Chain Business Technologies (SCBT) is Microsoft's Global Supply Chain Management group. All Microsoft products like Surface, Xbox, and other hardware and software that is sold in the market through different channels like retail outlets, online stores, etc., relies heavily on SCBT team. SCBT team operates out of 6 centres across 5 countries. With 5 Tier 1 manufacturing partners, 15 supply chain partners, and over 750 suppliers, the SCBT caters to about 50000 retail outlets and 300 retail partners over 60 countries.

To deliver smooth operations, and cater to the demand generated by retailers, manufacturers, and online customers, SCBT group built a Hybrid integration solution that leverages BizTalk Server and Azure Services to manage high volume global transactions. Because of the growing demand and the complexity of the integration solution, SCBT team faced the need to make sure every transaction is monitored and the system processes these transactions fluently. How did SCBT manage to monitor one of the most complex integration solutions in the world?

## Scale of the SCBT Integration Solution

The SCBT hybrid integration solution, running on top of Microsoft BizTalk Server is one of the most complex integration solutions in the world. This solution manages all of Microsoft's worldwide, physical manufacturing and supply chain operations. To maintain high availability of the integration solution, SCBT team maintains 16 different BizTalk Server Groups. Each BizTalk Server Group with its own BizTalk and SQL Servers is responsible for discrete activities that can work independently and in tandem.

The SCBT integration solution processes over 30 million B2B transactions (including multiple message formats like X12, EDIFACT, XML, SWIFT) per month with 2000+ partners spanning across all business domains. Message sizes range from 5 KB to 40 MB, and the data growth is at a rate of 6 TB per month. As the number of retailers, manufacturers, and customers increase, the need for centralized monitoring solution has increased too.



## Business Need

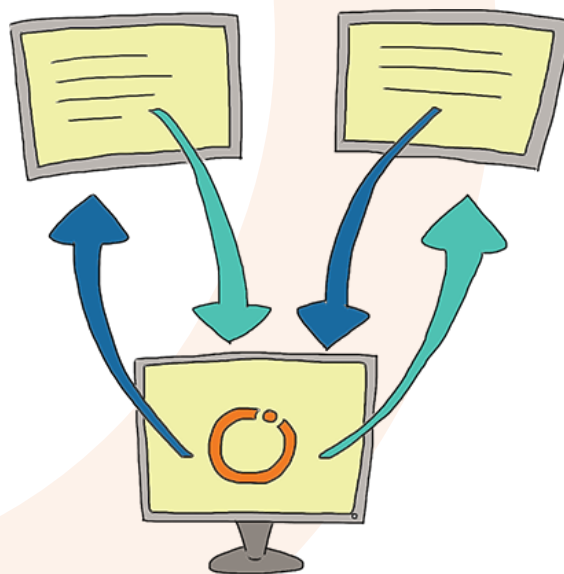
With ~ 250 million messages passing through the integration solution (BizTalk Server) every month, it is crucial for the SCBT team to ensure the messages reach the destination without any error. Any downtime means delays to the business process, impact on the customers, and ultimately to the business. Setting up the integration solution was only one half of the puzzle solved for the SCBT team. The other herculean task was to create processes and procedures in place to efficiently operate and monitor their 16 BizTalk Server production hubs.

The SCBT team chose Microsoft's System Center Operations Manager (SCOM) and additionally built internal home grown monitoring tools to address their operational and monitoring requirements for their BizTalk environments.

*"Each and every transaction that goes through our system is sensitive both in terms of transaction value and brand value. There are huge financial losses if we accidentally ship multiple orders of high value or in another case If someone didn't get their presents for Christmas they are going to be very upset and that will reflect on the whole brand value. Hence it's very crucial for us to run this complex system at near 100% accuracy"*

### Sandeep Kesiraju

Principal Program Manager  
Microsoft Supply Chain IT





## Challenges with SCOM and internal tools for monitoring BizTalk server

Microsoft SCOM (Systems Center Operations Manager) is a powerful enterprise monitoring solution, capable of monitoring everything. However, it introduces some challenges like maintaining a complex monitoring platform, requiring specialized skillset to understand and configure SCOM, in addition, monitoring capabilities of a general purpose product like SCOM is limited when it comes to a specialized middleware product like BizTalk Server. The SCBT team faced the exact challenges and struggled to receive BizTalk specific notifications. According to Anil Kongari, Microsoft's Senior Service Engineer, "We found SCOM to be noisy and at times, the team accidentally ignored and lost track of critical alerts from the system." The team often spent more time managing SCOM in terms of infrastructure, using the product, and dealing with the different alerts.

*"Customers like Microsoft Global Supply Chain are very important for us. The challenges we see in large scale implementation like SCBT help us to bring innovative features into BizTalk360 for Microsoft BizTalk Server operations and monitoring that helps our entire customer base."*

**Saravana Kumar**  
Founder – BizTalk360

The SCBT team also had a challenge in monitoring the non-events. There was no way they will know if there was a failure in the message transmission unless the receiving party complained of any issues. They also had to keep an eye on the transaction volume to see whether they are hitting their target SLA's

## BizTalk360 simplified monitoring and management for SCBT

According to Anil Kongari, "We needed centralized monitoring tool for artifact monitoring, data monitoring, intentionally stopped artifacts, clear actionable alerts with dashboard functionality, and auto healing features." After

evaluating other BizTalk monitoring tools, SCBT team took the decision to go ahead with BizTalk360 to monitor their integration solution.

*"In any operations world, issues are expected to come, but the success key is how soon we can detect and resolve the issues and keep customers and business happy, BizTalk360 does an excellent job of detecting and resolving issues, avoiding customer and business impact. We can rely on BizTalk360 to continuously monitor our hubs and selfheal to resolve issues proactively, thereby keeping our business up with 360 degrees of monitoring"*

**Anil Kongari**  
Senior Service Engineer,  
Microsoft

With 16 BizTalk server groups in place, it was crucial for the SCBT service operation team to keep track and send regular status updates of the BizTalk server groups to the leadership team. As Anil says, "With multiple hubs to monitor, they [service operation team] are tasked to send the BizTalk Hub status every 4 hours. They normally take a minimum of one hour to gather data and send an email to the leadership team. These manual hours of effort are pretty much eliminated with the use of BizTalk360. Keeping an eye on all the hubs with the centralized portal is giving greater confidence for all our Hub monitoring".

Saravana Kumar says, specific features like Data Monitoring capability was developed in association with Microsoft, which helps the SCBT team to monitor for non-events and get notified in case of any failures in the message transmission.

The focused BizTalk monitoring aspects of BizTalk360 really helped the SCBT team to receive genuine actionable alerts. One other most widely used feature is the Auto Healing capability, SCBT team feels that most of the issues are fixed even before they could realize there is an issue. Most importantly, all these operations are possible from a single operational console.

## The Future - moving in the direction of Hybrid Integration

In some scenarios, traditional on premise integration solutions like BizTalk Server may not be the viable choice. For example, seasonal burst load on the integration system during festive and holiday seasons.

To address these challenges, SCBT is investing in modern cloud based integration solutions like Azure Logic Apps, API Apps, and Azure Service Bus in addition to BizTalk Server to take advantage of the current industry trend. Microsoft BizTalk Server 2016 with support for Azure Logic Apps two-way communication is the perfect fit for organizations to bridge the hybrid integration gap between on premise and cloud.

On the other hand, BizTalk360 is keeping up the pace in terms of technology improvements and bringing in new features into the product to support Azure and its components.

According to Tord Glad Nordahl, "As part of this journey [helping the SCBT team switch to BizTalk Server 2016], we also worked closely with BizTalk360 team to make sure they are compatible with the latest version of BizTalk Server. The team is very dynamic and responded to changes very quickly." The latest version of BizTalk360 supports Operations and Monitoring of Azure Logic Apps, Service Bus Queues and API Apps, thereby making it the perfect fit to have a single unified operation solution across on premise BizTalk installations and the cloud.

## The end results

SCBT team use the latest version of BizTalk360 on their BizTalk environment. The benefits are twofold – in terms of time taken for the service operation team to generate frequent health reports and to achieve 100% monitoring coverage of all their 16 BizTalk server groups from a single UI.

*"At Microsoft, we eat our own dog food. Any big product updates will first be tested and implemented internally. We worked with SCBT team closely in helping them switch to Microsoft BizTalk Server 2016."*

### Tord Glad Nordahl

Program Manager  
Microsoft BizTalk Server

What's really changed is the way the team handles alerts — more genuine and actionable alerts. What took days and hours previously is now possible in few clicks. The powerful combination of Operations and Monitoring capabilities of BizTalk360 (most commonly referred to as "One Platform") paved way for Microsoft's SCBT team to better manage and monitor their integration solution and meet the growing demand.

*"Before BizTalk360 our team was spending hours getting an overall health report of the status of the 16 central BizTalk hubs, today it's all automated thanks to BizTalk360, our executive team gets report twice a day showcasing the entire health of our BizTalk platform."*

### Anil Kongari

Senior Service Engineer,  
Microsoft



w: [biztalk360.com](http://biztalk360.com)  
e: [contact@biztalk360.com](mailto:contact@biztalk360.com)  
t: +1 (855) 867-8251