Network Services Company, Schaumburg, IL

NETWORK’s Successful SAP HANA Journey Goes Through the Cloud

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Michael Johnson, CFO, Network Services Company

**Challenges**
- Full migration of SAP HANA to the cloud
- Upgrade ECC from EHP3 to EHP7
- Upgrade all systems to be compatible with SAP HANA, including PI, Portal, MDM, Vertex, Esker, Paymetric, and eCommerce (CDI)
- Hardware/DB Migration to SAP HANA for ECC and BW
- Routine processes and SAP T-codes having long-running response times
- Long-running BW Query times limiting usefulness of analytics and reporting
- No in-house SAP HANA expertise

**Benefits**
- Performance improvements to on-premise SAP ECC system and its management of high-transaction volumes
- Help employees working in financial applications by expediting their execution and report generation
- Reduce query times against its BW installation
- Modernize all SAP investments and applications via an upgrade to Enhancement Pack 7
- Managed Cloud (Hosted) environment spreads financial cost over time, allowing for continued upgrades to future solutions
- Managed Cloud (Hosting) Pay As You Grow pricing model avoids SAP HANA appliance and server purchases both on premise and in our DR Data Center

**Solutions**
- SAP HANA in the cloud
- Enhancement Pack 7

**Why itelligence?**
- Expertise in modernizing and migrating to SAP HANA products in the cloud
- Proven experience and leadership advising enterprises modernizing and transitioning to SAP HANA
- Effective testing of migration steps and go-live coupled with ongoing environment support, ensuring a seamless and efficient transition
Need for SAP HANA Modernization

NETWORK’s journey to SAP HANA began in 2013, when CIO Paul Roche proposed a strategy to the company’s Board and the management team. Through a shared governance and buy-in approach to SAP HANA, expectations were clearly set for how end goals would be met.

While the decision to move to SAP HANA may have been relatively easy, determining the best way to get there proved to be very complex. Eventually, after extensive statistical and financial analysis of various hosting partners, NETWORK chose itelligence. “We were impressed with the expertise that we identified with our hosting partner,” said Michael Johnson, CFO, Network Services Company. “We knew little about SAP HANA. They were experts, and we felt they were best equipped to satisfy us from that perspective.”

The project planning took the form of three phases executed in two "end user" steps. itelligence led the migration to hosting during the first phase from August 2014 to mid-February 2015. This included migrating Dev/QA/Prod to a hosting site, while performing Windows OS and SQL DB upgrades at the same time. A third aspect included new primary and backup VPN circuits for telecom improvements. The second phase involved an upgrade and database migration from the first week of January through April.

Upgrading and SAP HANA Migration

Phase two of NETWORK’s journey to SAP HANA began in early January, following the completion of the cutover to the itelligence Managed Cloud. Throughout this phase, teams from NTT Data, itelligence, and NETWORK worked closely to plan, manage and execute the technical upgrade and migration, regression testing and initial application optimizations required for a successful go-live. For the ERP landscape, phase two involved upgrading the three tier landscape from ERP 6.0 Enhancement Pack 3 to the latest support stack of ERP 6.0 Enhancement Pack 7. This enhancement pack upgrade was combined with a migration from SQL Server to SAP HANA utilizing the one step approach enabled by the Database Migration Option (DMO) of SUM (Software Update Manager).

For the three tier BW environment, no upgrade was required since the source landscape was already at the required minimum release of Netweaver 7.30. However, there was a need to apply a support package stack prior to beginning the SAP HANA conversion. Once that was completed, the BW SAP HANA migration was executed using standard SAP database migration tools for SAP HANA. The BW and ERP landscapes were migrated to SAP HANA in parallel, with both projects starting in early January and completed successfully in production less than four months later, in late April.

<table>
<thead>
<tr>
<th>Pre-Migration Database Size on SQL Server</th>
<th>Post-Migration SAP HANA Memory Utilization</th>
<th>Approximate Production Downtime*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERP 1.5 TB</td>
<td>700 GB</td>
<td>24 hrs</td>
</tr>
<tr>
<td>BW 600 GB</td>
<td>280 GB</td>
<td>18 hrs</td>
</tr>
</tbody>
</table>

* Includes time required for completing a VM clone of the source release database server. Also includes time required for BW support packages.
A Cost-Effective Cloud Transition
 NETWORK’s SAP HANA journey did not originally include plans for the cloud. Instead, executives initially believed the company’s standard on-premise approach would continue to be the proper route. However, opinions changed when decision makers evaluated factors such as a cost analysis over the next decade and disaster recovery requirements, according to Roche.

“We never set out to go to the cloud,” said Roche. “We set out to go to SAP HANA.” He added, “After looking at the numbers, it made sense for us to be in the cloud.” CFO Johnson also praised SAP HANA in the cloud, “It helped us realize some cash flow advantages. Because moving to a hosted environment spreads the cost out over time from an operating expense versus a one-time capital expenditure in [technology] that would eventually become obsolete.”

Positioned for Success
 Through the decisions that have been made, NETWORK believes the company has effectively moved ahead of the curve. Recent SAP S/4HANA developments make their case even stronger. “SAP HANA positions us to do things better,” said Johnson. “With the S/4HANA announcement, we were going to have to do this anyway if we want to take advantage of future enhancements. So we’re ahead of the game, and we’re ready to do that.” Looking ahead, the company plans to take advantage of even more new technologies. Johnson concluded, “We’re looking forward to Simple Finance—I think that’s going to be of great benefit to us, and we’re ready to go.”

Collective Ownership for United Results
 A company-wide commitment to the testing phase proved critical in producing great success. The company has seen AR lists reduced from 360 seconds to 10 seconds, while AP lists have been reduced from 300 seconds to 30 seconds. In addition, BW on SAP HANA query times have improved 90 percent, enabling employees to spend more time in value-added activities and make faster decisions. As a result, NETWORK is realizing productivity gains—thousands of percent improvements in some cases—rooted in better analysis. Further, by moving to a hosting platform, NETWORK freed up over 30 TB of tier-one storage, which were redeployed for other applications.

About Network Services Company (NETWORK)
 NETWORK is the flexible, integrated distribution solution that improves supply chain efficiency and drives business success. For corporate accounts in industrial, commercial real estate, healthcare, foodservice, printing and the public sector, NETWORK offers deep experience, vast infrastructure, customizable programs and best-in-class products in our core categories of janitorial supplies and equipment, foodservice disposables, packaging supplies and equipment, and printing papers. Their system blends single-source convenience with true local market presence on an international scale. Centralized account management provides greater control, while their network of distributors delivers the flexibility, accountability and category expertise you need to stay ahead of the competition.