



The Debut of SAP Replication Server 16 and its Future Direction.

Kaleem Aziz, SAP
Month 10, 2017

CUSTOMER

Agenda

Product Overview

- Product description
- Key trends and customer needs
- Road map overview and major product updates

Product Road Map

- Recent innovations
- Planned innovations
- Product direction
- Product vision

Appendix

Product Overview

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Modernize your Enterprise Information Management (EIM) infrastructure

“Through 2018, organizations modernizing their information infrastructure with a 'capabilities' approach will reduce their time to delivery for new cloud and on-premises systems and enhancements by 30% without increasing staffing.”

Source: Gartner

About SAP Replication Server: A market leader

Proven in mission-critical environments



5,000+

SAP Replication Server customers worldwide



Leader

- Gartner Magic Quadrant for Data Integration
- Forrester Wave: Enterprise Data Virtualization



Patented Innovator

10+ patents awarded for performance boosting technologies



The Standard

in Financial Services organizations



1st

transactional data replication tool on the market

SAP Replication Server

Value to customers



Easily deliver continuous access to business-critical information as well as disaster recovery



Provide report servers and enterprise data warehouses with up-to-the second data for time-critical business decisions



Low cost of ownership from implementation through day-to-day management and expansion



Simplified deployment and predictability delivered



Cargill reduced operating costs from \$42 million to \$13 million – a \$29 million reduction in costs – with SAP Replication Server.



SAP Replication Server saves Addison Lee €300,000 per hour of potential lost call center revenue by keeping data available 24x7.



SAP Replication Server

National Basketball Association – Instant Statistics and In-progress Updates

“For the very first time, fans have direct access to a league’s entire history and its entire database of situational stats.”

Steve Hellmuth, Executive Vice President of Operations and Technology, National Basketball Association

The screenshot shows the NBA.com/Stats page with a banner for the NBA Africa Game 2015. Below it, a section titled 'REGULAR SEASON LEAGUE LEADERS' displays the top players for Points Per Game. The table includes player names, team logos, and statistics. A 'STATS HOME' button is visible at the top right.

Rank	Player	Team	PPG	Rebounds	Assists	Steals
1	Russell Westbrook	OKC	28.1	7.8	4.2	2.1
2	James Harden	HOU	27.4	7.5	3.7	2.1
3	LeBron James	CLE	25.3	7.6	3.7	2.1
4	Anthony Davis	NO	24.4	7.8	3.7	2.0
5	DeAndre Jordan	LAC	15.0	10.0	3.7	1.0
6	Chris Paul	LAC	10.2	4.8	7.0	1.0
7	John Wall	WAS	13.5	4.8	3.7	1.0
8	Andre Drummond	DET	12.7	10.0	2.7	1.0
9	DeMarcus Cousins	SAC	11.8	7.5	3.7	1.0
10	Pau Gasol	CHI	10.2	5.8	3.7	1.0
11	Russell Westbrook	OKC	8.6	4.8	3.7	1.0
12	Ty Lawson	DEN	9.6	3.8	3.7	1.0
13	Stephen Curry	GSW	8.6	3.8	3.7	1.0
14	Russell Westbrook	OKC	8.6	4.8	3.7	1.0
15	Tony Allen	MEM	9.6	3.8	3.7	1.0

SAP Replication Server Enabled Key Benefits

> 4.5 Quadrillion

Combinations of statistics

250

Statistics generated per second

5 Minutes

After each game, the statistics site is updated

> 65 years

Of statistics available on site

> 450 Million

Global fans of NBA basketball

> 215 Countries

Enjoy NBA programming

<http://stats.nba.com/>



SAP Replication Server

A Passage to India – Need to provide accurate schedule updates



The Great Indian Railways

- 20 Million Passengers, 2.8 Million Tons of Freight - Daily
- 72,000 Miles of track
- 9000 trains across 6000 stations is a challenge
- **Business Problem:** Needed a real-time solution for arrival and departure information for these Millions of passengers

SAP Replication Server – Supporting Large Scale Migrations

ARIBA Networks – Needed to migrate 12TB of Data with near zero downtime!



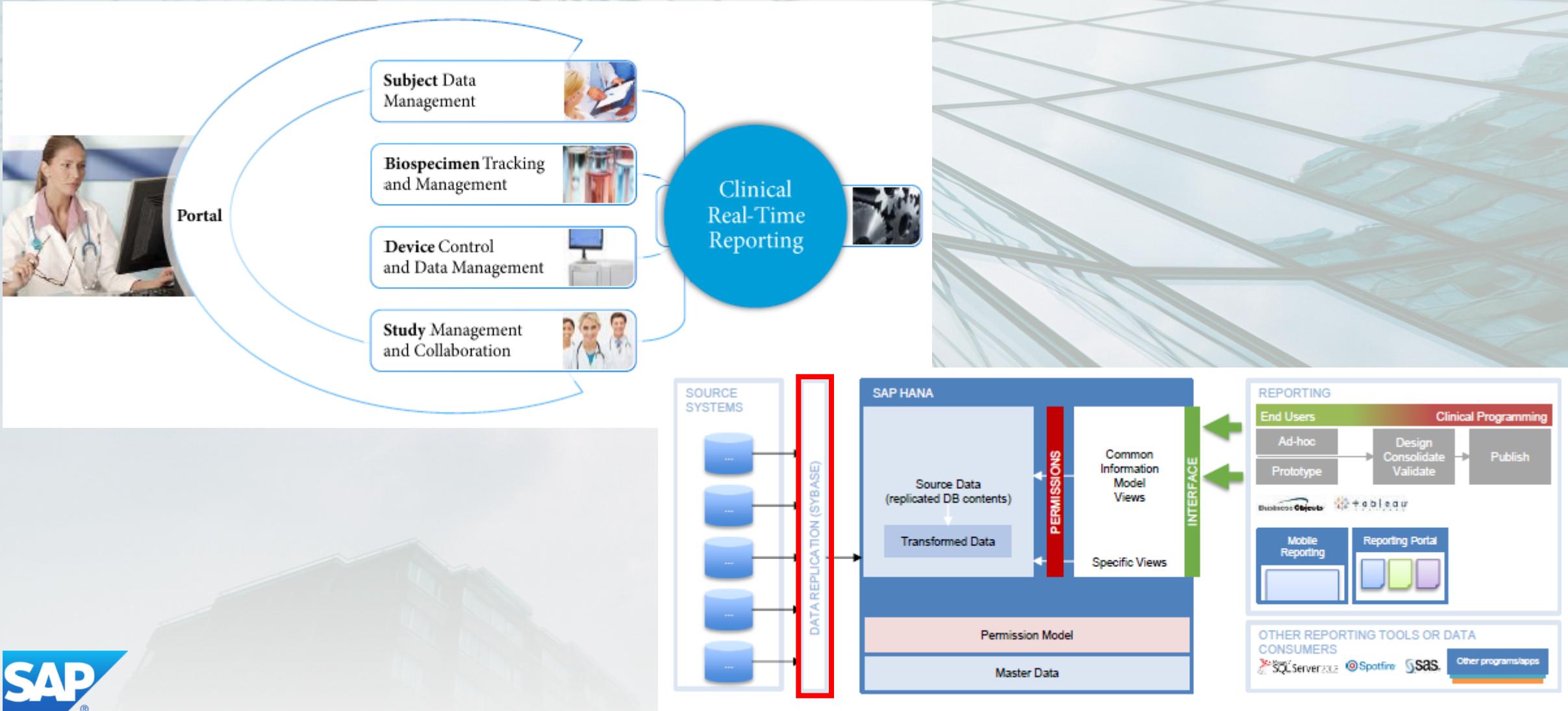
SAP Replication Server – Supporting Real-time Reporting

Roche – Needed to consolidate 3TB of Data from multiple DBs for real-time reporting!



SAP Replication Server

Global Clinical Company – Supporting Real-time Clinical Reporting!



The Philosophical Foundations

- Data has to be where you need it when you need it
 - Across Geographies
 - Across Infrastructures



- Data has to be ready for action
 - Continuity depends on fast recovery
 - Insights depend on fast access



- Data driven era
- Data availability is important
 - Business continuity
 - Active Insights

SAP Replication Server

Improved recovery, timely decisions, real-time synchronization

SAP Replication Server is a high-performance transactional data movement product that synchronizes and replicates data across the extended enterprise. It guarantees data delivery, zero operational downtime, and non-intrusive data handling.

Delivers Transactional Data in Real-time

- Across geographical and business boundaries
- Insuring transactional integrity and data consistency

Accelerates Data Availability

- For recovery
- For access

Enables

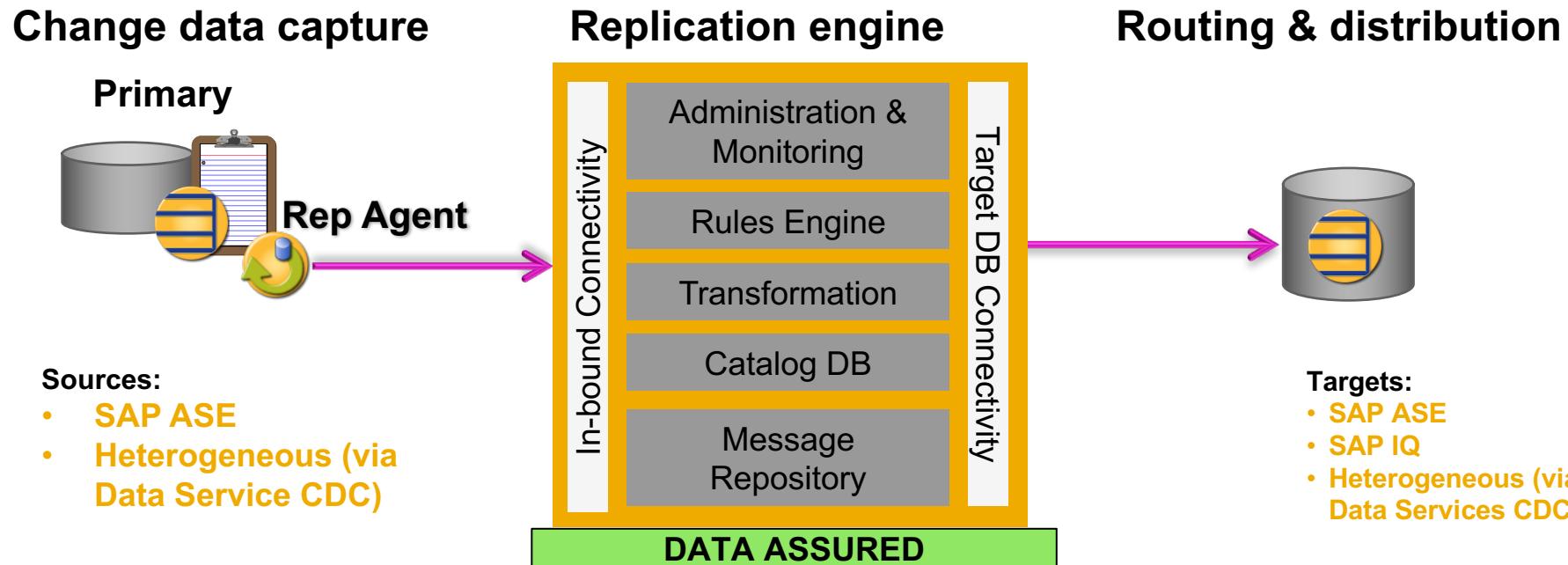
- Business continuity
- Active insights



Enable Business Continuity & Active Insights

SAP Replication Server

In the EIM product portfolio



Exceptions and limitations apply. Please check user documentation for end-to-end source and target database certification.
See appendix for expansion of acronyms

Note: Replication to SAP HANA will be supported by SAP HANA smart data integration solution.

SAP Replication Server

Key trends and impacts in business and technology

ASE Replication

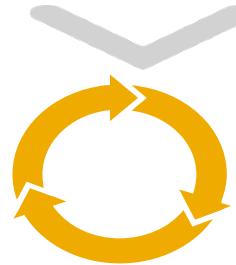
ASE-to-any and any-to-ASE



- Supports ASE replication to supported databases
- Supports supported databases to ASE replication
- Note: Replication to SAP HANA will be supported by SAP HANA smart data integration solution.

Performance and Reliability

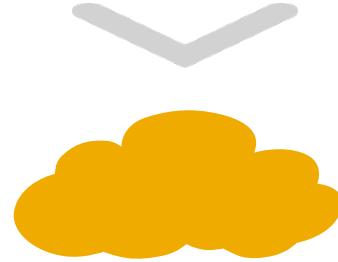
Performance, Usability, Monitoring & Consistency



- Improved replication agent and server performance tuning
- Enhanced setup and configuration, and performance tuning support
- Enhanced management and monitoring support
- Data consistency and reconciliation from any supported source to any supported target

Cloud Deployment

CapEx to OpEx Business Transformation and Agility

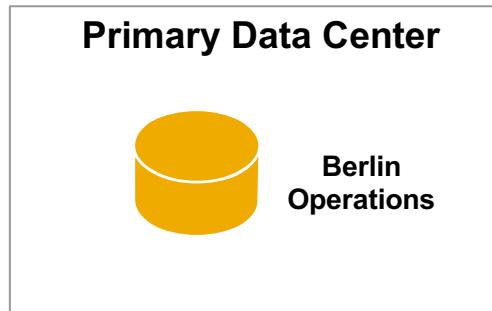


- Reduce costs by deploying replication solutions in cloud
- Take advantage of SAP solutions for cloud deployment
- Streamline and integrate with enterprise cloud solutions

SAP Replication Server

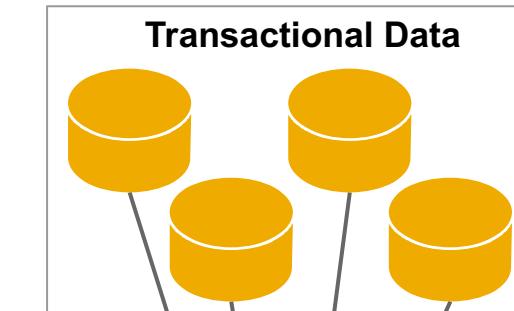
Customer needs and the value propositions of the product

DB High Availability/ Disaster Recovery



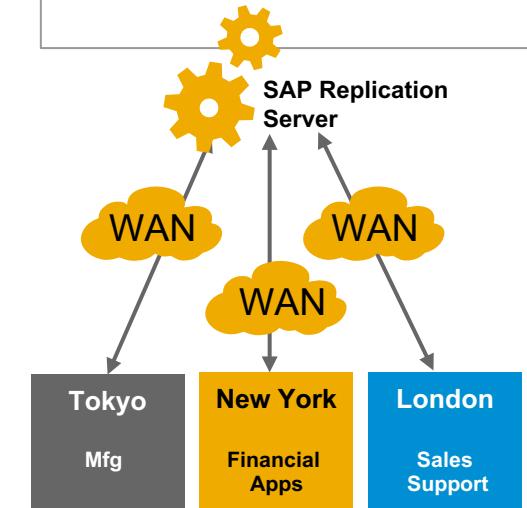
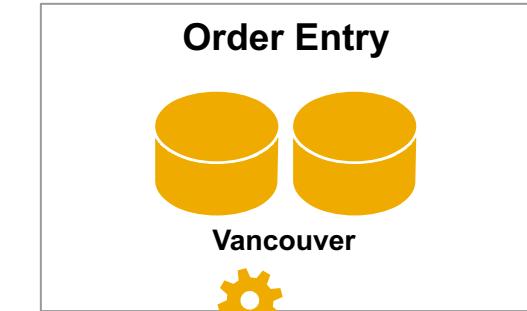
Real-Time Reporting (data consolidation)

Real-Time Reporting (data consolidation)



Reporting & Analytics

Data Distribution



SAP Replication Server

Product road map overview - key themes and capabilities

Recent innovations

ASE support

- ASE 16 support (HADR and CI)
- Zero data loss (ZDL) synchronous replication with schema changes for custom apps and for Business Suite apps
- External replication into and out of HADR Cluster
- HADR materialization with subscription labels, to distinguish dump transaction and materialization marker
- DR for Business Suite on ASE
- Performance enhancements
- Virtual IP support for ASE CE

Core enhancements

- Enhanced management and monitoring support with RMA
- AWS certification
- Data Assurance updates

2017 – Planned innovations

ASE support

- ASE 16 SP03 support
 - IMRS/DRC
 - MVCC
- TCO optimizations – memory/disk
- Performance enhancements (T-shirt sizing)
- Common Component Library (CCL) support

Core enhancements

- Certify SAP Replication Server (SRS) for replication within HANA Accelerator for ASE (A4A) scenario
- Certification of latest/newer versions of third party database with ASE
- Documentation for AWS
- Japanese and Chinese Localization

2018 – Product direction

ASE support

- ASE 16 SP04 support

Core enhancements

- Newer certifications of SRS for replication within A4A scenario
- User Interface improvements for Monitoring and Administration

2019 – Product vision

ASE support

- New feature support

Core enhancements

- Additional A4A support
- Enhance User Interface for Diagnostics and Cloud support

(SRS 15.7.1 SP 200 – 305)

This is the current state of planning and may be changed by SAP at any time.

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SAP Replication Server version 15.7 SP305

ASE Support

Recent
innovations

ASE support

Functional Area	Feature	Feature Value
HADR	<ul style="list-style-type: none">▪ SAP ASE 16 support	<ul style="list-style-type: none">▪ Replication support for new features of SAP ASE 16 (e.g. granular permission support)▪ Support our current custom application customer base
HADR	Zero data loss (ZDL) synchronous replication for custom apps and Business Suite, including ability to handle DDL changes	The always-on zero data loss protection with immediate failover in case of node failures
HADR	External replication into and out of HADR Cluster	A failover cluster for the primary HADR cluster
HADR	SAP Business Suite on SAP ASE Disaster Recovery	<ul style="list-style-type: none">Support for long distance (WAN) disaster recovery support for SAP Business Suite on SAP ASE (15.7)Support real-time replication for ECC on SAP ASE
HADR	Support for SAP ASE Cluster Edition with virtual IP support	Support SAP ASE Cluster edition as a replication source
HADR	<ul style="list-style-type: none">• HADR materialization with subscription labels, to distinguish between dump transaction and materialization markers	<ul style="list-style-type: none">• HADR materialization with subscription labels, to distinguish between dump transaction and materialization markers

SAP Replication Server version 15.7 SP305

Recent
innovations

Core Enhancements

Core enhancements

Functional Area	Feature	Feature Value
AWS	<ul style="list-style-type: none">▪ Certification on Amazon Web Services (AWS)	<ul style="list-style-type: none">▪ Support for replication across on premise and AWS cloud-based instances▪ Migration to the cloud, backup to the cloud, anywhere reporting
RMA	<ul style="list-style-type: none">▪ Enhanced management and monitoring support with Replication Management Agent (RMA)	<ul style="list-style-type: none">▪ New API for monitoring replication environment for SAP Business Suite on SAP ASE▪ Support for setup/configuration of replication between Heterogeneous sources and SAP HANA targets▪ To satisfy the user request for Basic Monitoring and Management for SAP ASE and heterogeneous replication
Data Assurance updates	<ul style="list-style-type: none">▪ Data Assurance enhancements	<ul style="list-style-type: none">▪ Data comparison and reconciliation support for new data source/targets – SAP IQ, SAP HANA.▪ Data Assurance as Windows service▪ Support for new data types/conversions such as from Timestamp to varchar (Variable Character Field), and Byte to String▪ Easier to compare many tables with similar prefixes

SAP Replication Server

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2017 Planned innovations

ASE Support

Planned
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ASE support

Functional Area	Feature	Feature Value
HADR	<ul style="list-style-type: none">▪ ASE 16 SP03 support	<ul style="list-style-type: none">▪ Support new features of ASE 16 SP03, namely, IMRS/DRC and MVCC
HADR	<ul style="list-style-type: none">▪ Performance enhancements	<ul style="list-style-type: none">▪ Support T-shirt sizing and improve large transactions handling
HADR	<ul style="list-style-type: none">▪ TCO Optimizations	<ul style="list-style-type: none">▪ Reduction of queues for improved memory and storage management

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2017 Planned innovations

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Core enhancements

Functional Area	Feature	Feature Value
Certification	<ul style="list-style-type: none">▪ Certification of newer versions of supported databases	<ul style="list-style-type: none">▪ Support newer versions of supported source and target databases
Certification	<ul style="list-style-type: none">▪ SRS certifications for HANA Accelerator for ASE (A4A)	<ul style="list-style-type: none">▪ ASE to HANA replication certification for A4A
Documentation	<ul style="list-style-type: none">▪ SRS Documentation for AWS support	<ul style="list-style-type: none">▪ SRS Documentation on what is certified with AWS
Localization	<ul style="list-style-type: none">▪ Localization of SRS	<ul style="list-style-type: none">▪ Localization of SRS into Japanese and Chinese

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2018 Product direction

The theme of SRS releases in 2018 is planned to be:

- Further contribution to ASE support
 - Support new features of new ASE releases
- Improved support for HANA Accelerator for ASE (A4A)
 - Certify and optimize ASE to HANA replication used internally in A4A

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(SRS 15.7.1 SP 200 – 305)

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2019 Product vision

The vision for SRS in 2019 is to:

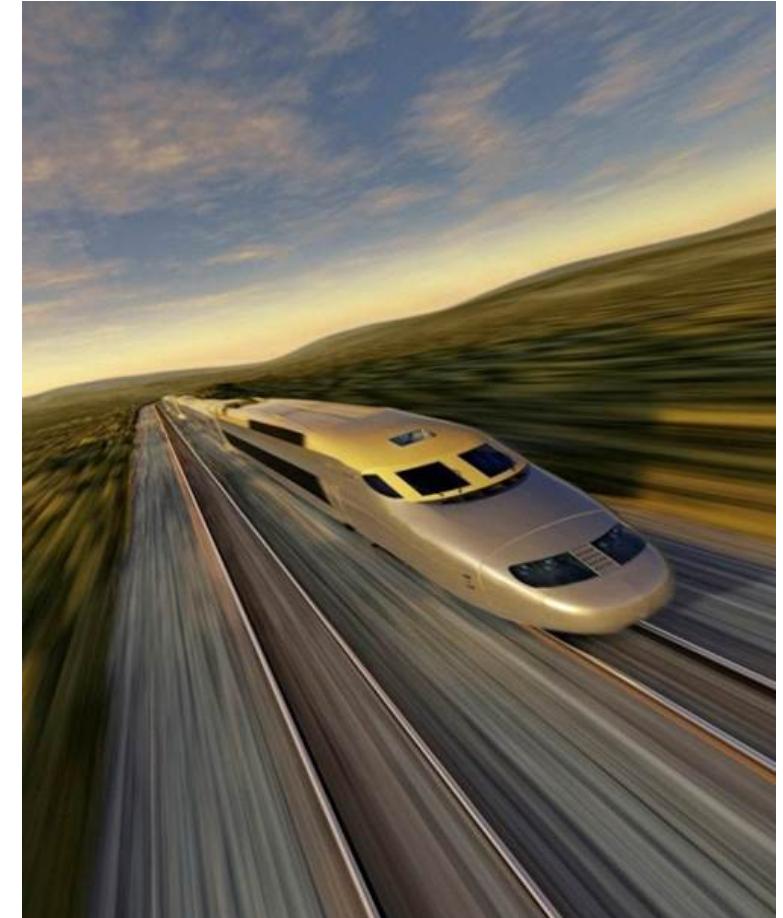
- Continue ASE support into its vision for cloud
 - Assist ASE cloud efforts with any innovations in data movement needed between cloud and on-premise
- Improve usability using HANA innovations in UI
 - Extend usability (viz., ease-of-use and stability) of ASE to HANA replication used internally in A4A

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Summary

SAP Replication Server is an industry leader, providing non-intrusive transactions capture, flexible transformations, and high performance loading in heterogeneous environments without geographical limitation while maintaining transactional integrity

- Optimized and certified for SAP Business Suite on SAP ASE to support high availability and disaster recovery
- Enabling real time for SAP HANA platform with log-based, high performance, low latency replication
- Enabling real-time replication for big data targets and providing coverage with new sources
- Capable of powering the most demanding mission-critical systems, from Wall Street to Main Street and everywhere in between



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Upcoming SAP ASE Events

Upcoming webcasts:

Register here:

<https://event.on24.com/eventRegistration/EventLobbyServlet?target=reg20.jsp&referrer=&eventid=1480117&sessionid=1&key=EC65E8FCB99D96463A86466A9157D459®Tag=150696&sourcepage=register>

October 24, 2017: The value proposition of SAP HANA Accelerator for ASE 2.0 SP02

November 7, 2017: SAP ASE Workload Analyzer Option 16 SP03 for upgrade, migrations and diagnostics

Upcoming in-person SAP ASE events:

SAP TowerTalk Frankfurt, October 10

Register here: <http://events.sap.com/de/sap-tower-talk/de/home>

TechSelect New York, October 12

Register here: <http://my.isug.com/p/cm/lid/fid=1200>

TechSelect London, October 17

Register here: <http://www.uksug.com/events/techselect-london-2017-sap-ase-sp03-launch-party>

Thank you.

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