

SAS94 „fast Deployment“ Projekt



SAS
Plattform
Netzwerk
Heidelberg
4.April 2014

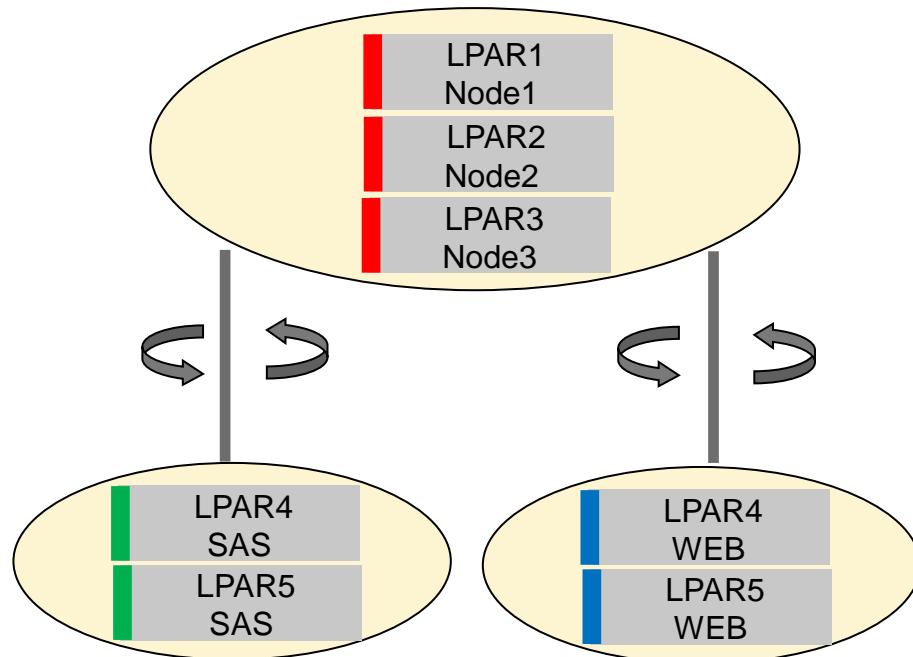
SAS94 „fast Deployment“ Projekt

Der Vortrag zeigt eine konzeptionelle Verfahrensweise
zur Minimierung der Maintenance Downtime von
SAS Intelligence Plattform multi-tier Architekturen

Inhalt

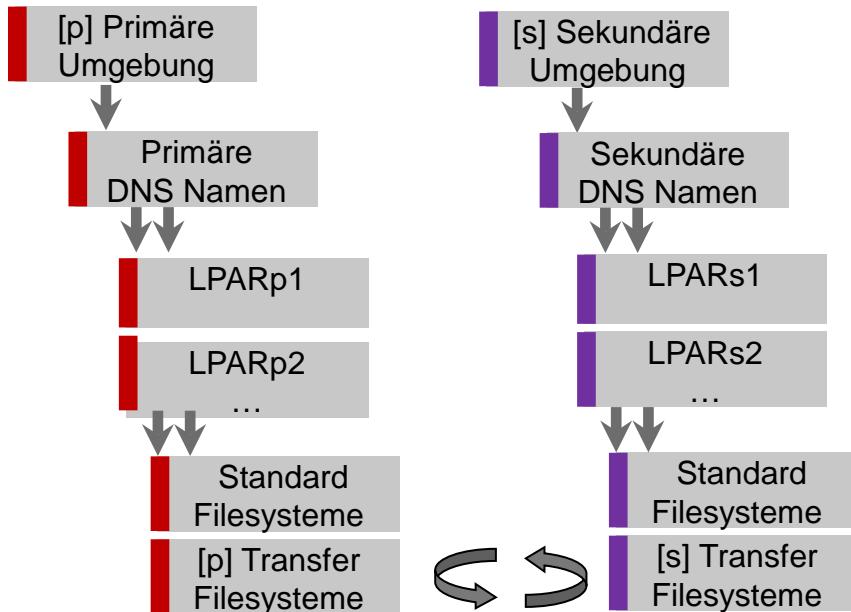
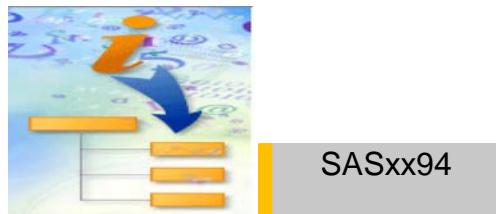
1. SAS94 Architektur
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1. SAS94 Architektur



- Server
 - SAS Metadata Server (Cluster)
 - SAS Compute Server (Cluster)
 - SAS Midtier Server (Cluster)
- Plattform
 - z/OS
 - z/OS AIX
 - AIX
- SASxx94-Umgebungen
 - SAS Enterprise BI (2)
 - SAS Customer Intelligence (2)
 - SAS IT Resource Management (1)
 - SAS Evaluierung (1)

2. SAS94 System Definitionen



- Definitionen pro LPAR & SASxx94 System
 - [p],[s] DNS-Namen sind verschieden
 - [p],[s] Ports und Directory-Namen sind gleich

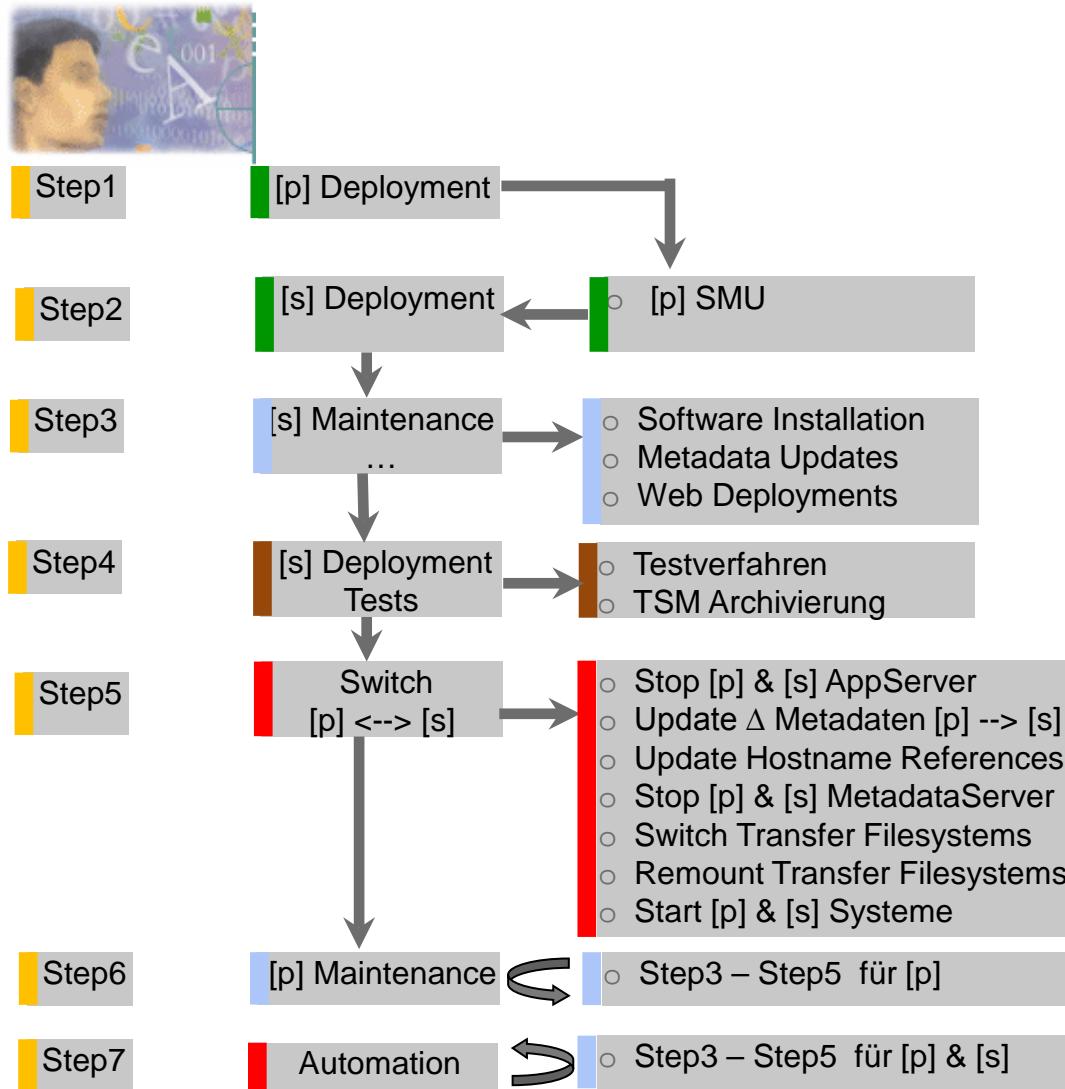
- Standard Filesysteme

<ul style="list-style-type: none"> ▪ ..//sasXXdepot ▪ .../sasmisc ▪ .../sasxxdata ▪ .../sasXX94/mdbbackup ▪ .../sasXX94/logs ▪ ... 	Software Depot Java,JUnit,Scripts SAS Daten Metadata Backups SAS Log Files
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- Transfer Filesysteme

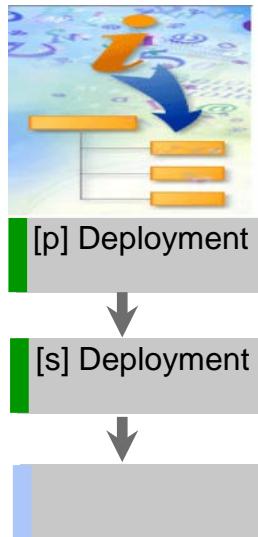
<ul style="list-style-type: none"> ▪ ..//sasXX94/config/Levy ▪ ..//sasXX94/sashome 	Config Level y=1,2,3.. SAS Foundation
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3. SAS94 „fast Deployment“ Plan



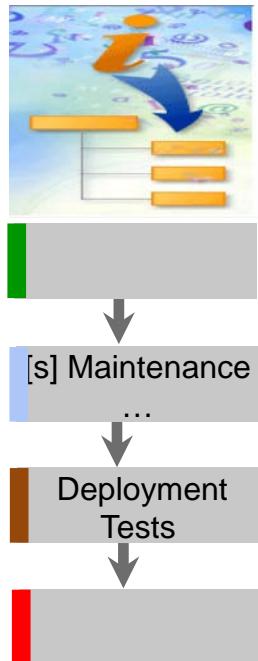
- Gruppierung
 - Installation & Konfiguration
 - Maintenance
 - Test etc.
 - Produktionseinsatz
- Ziel:
 - Höhere Qualität der Maintenance
 - Reduzierung der Downtime **1-2h !?**
- Abkürzungen:
 - [p] .= primäre Umgebung
 - [s] .= sekundäre Umgebung
 - SMU .= SAS Migration Utility
 - TSM .= Tivoli Storage Manager

3. SAS94 „fast Deployment“ Plan – Deployment [p] & [s]



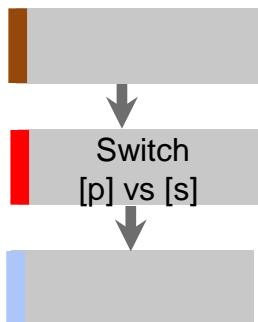
- **Step1:** [p] Deployment
 - Installation
 - Konfiguration
 - SMU Package
- **Step2:** [s] Deployment
 - Installation
 - Konfiguration + SMU Migration

3. SAS94 „fast Deployment“ Plan – [s] Maintenance + Test



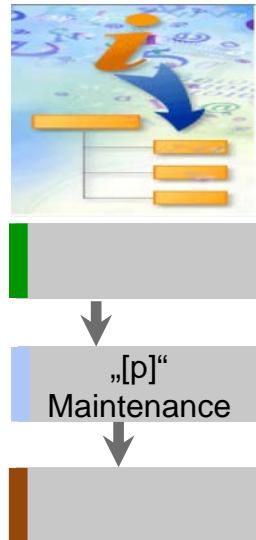
- **Step3:** [s] Maintenance
 - Apply Hotfix Level oder Maintenance Release
 - Software Installation
 - Metadaten Update
 - Web Deployments
- **Step4:** [s] Deployment Tests
 - SMC Validierungen
 - SAS Base Tests
 - Eigene Testverfahren
 - Archivierung des Software Standes (TSM)

3. SAS94 „fast Deployment“ Plan – Switch [p] & [s]

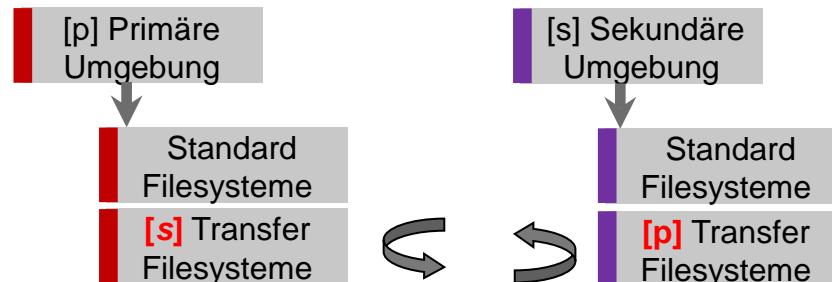


- **Step5:** Switch [p] & [s]
 - Stop [p] & [s] App Server
 - partielle Promotion – Batch Utility
 - [p] Extract zeitliches Delta + Filter der Metadaten
 - [s] Import Metadaten
 - SAS Deployment Manager
 - Update Hostname References
 - [p] Primäre -> Sekundäre DNS Namen
 - [s] Sekundäre -> Primäre DNS Namen
 - Stop [p] & [s] Metadata Server
 - Switch der Transfer Filesysteme (config + sashome)
 - [p] - Mount [s] Transfer Filesysteme
 - [s] – Mount [p] Transfer Filesysteme
 - Start [p] & [s] Systeme

3. SAS94 „fast Deployment“ Plan – „[p]“ Maintenance + Automation

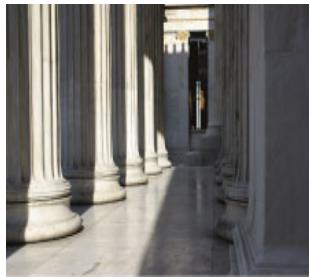


- **Step6:** „[p]“ Maintenance
 - Durchführung Step3-Step5
 - [s] Umgebung hat jetzt die [p] Transfer Filesysteme !
 - [p] Umgebung hat jetzt die [s] Transfer Filesysteme !



- **Step7:** Automation
 - Start/Stop Verfahren
 - TSM Archivierung
 - partielle Promotion Batch Utility
 - Transfer der Filesysteme
 - Update Hostname Reference

4. SAS94 „fast Deployment“ - Aktueller Stand 2014.04

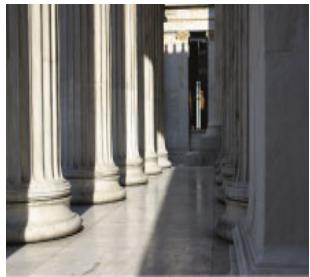


Meilensteine ...

- **Step1:** [p] Deployment
 - SAS94 TS1M1 2014Q1
 - Metadata Cluster Support z/OS
 - SAS94 TS1M2 2014Q2
- **Step2:** [s] Deployment
 - SAS94 TS1M1 + SMU Migration 2014Q1
- **Step3:** [s] Maintenance
 - SAS94 TS1M2 2014Q2
- **Step4:** [s] Deployment Tests
 - SAS94 TS1M2 2014Q2
 - SAS94 TS1M1 2014Q1
- **Step5:** Switch [p] & [s]
 - SAS94 TS1M2 2014Q2
 - SAS94 TS1M1 z/OS -> Tracks 2014Q1
- **Step6:** „[p]“ – Maintenance 2014Q2
- **Step7:** Automation 2014Q3

- Tracks :
 - SAS Deployment Manager - Update Hostname Reference
 - 7611191941 – Dokumentation
 - 7611192052 – Fehlende Updates, Fixed SAS94 TS1M2

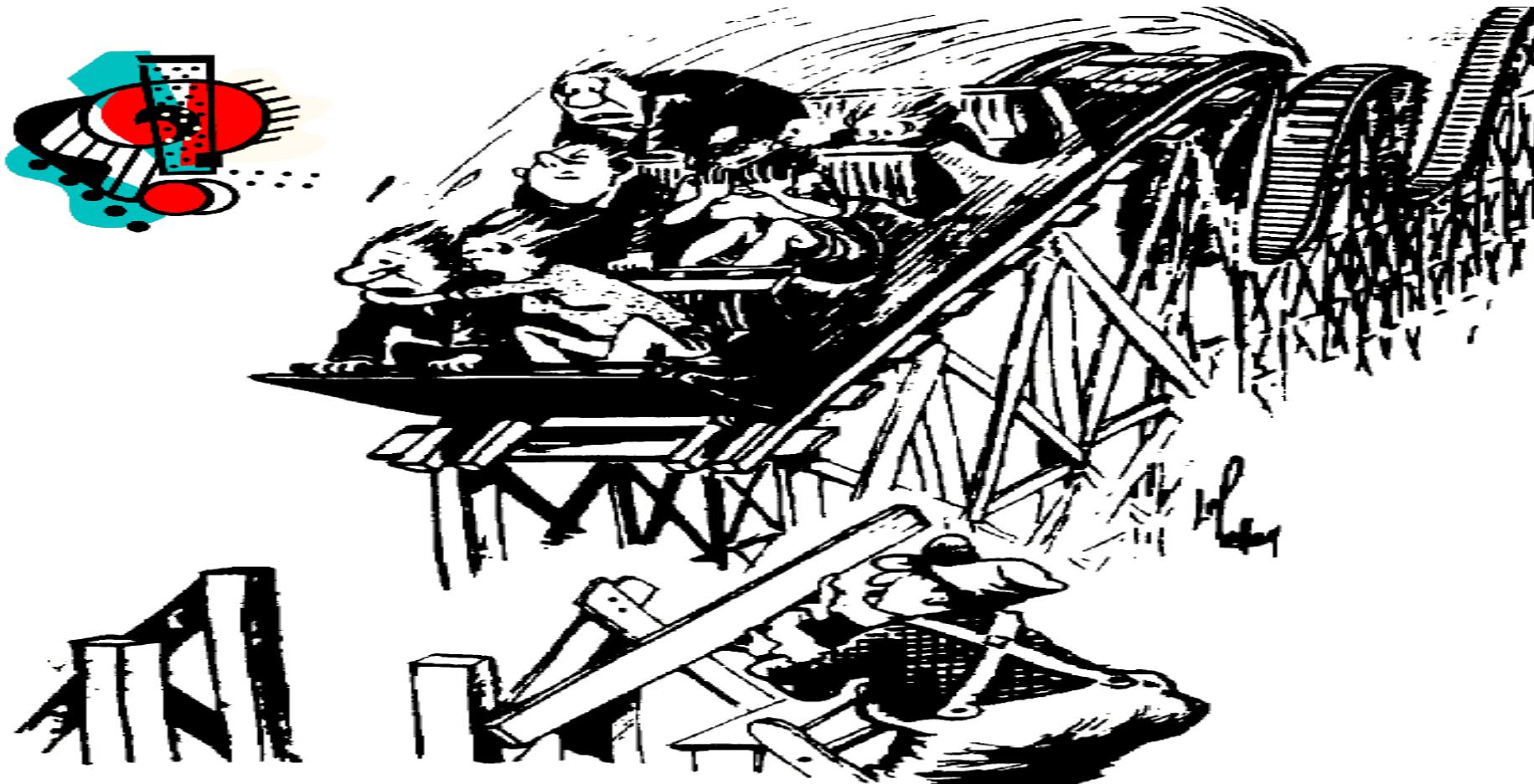
4. SAS94 „fast Deployment“ - Fazit



Zwischenstand ...

- SAS z/OS Metadaten Server + Compute Server
 - Installation & Konfiguration mit SMU
 - Maintenance Hotfixe
 - Update der Metadaten mit partieller Promotion
 - Update der Hostname Referenzen
 - Austausch der Filesysteme
 - Restart
 - Downtime <= 1h
- SAS AIX MidTier + Compute Server
 - vFabric tc Server
 - Content Server
 - Postgres DB
 - Update der Hostname Referenzen
- Automation
 - Teilprozesse
- Gesamttest
 - Server Cluster inklusive Midtier

5. Fragen



"Good news folks. The project is 90% finished."