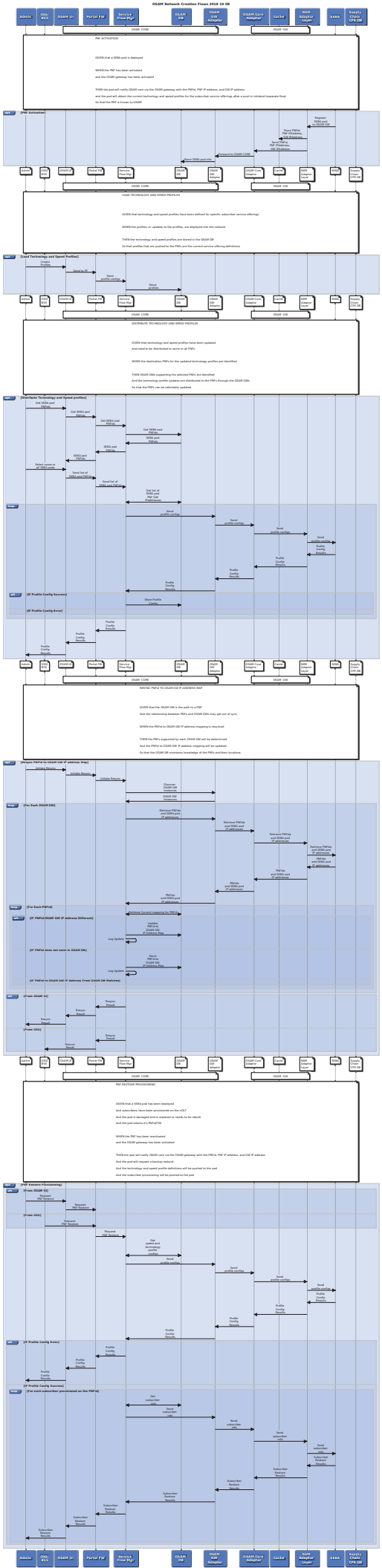
OSAM Network Creation Flows 2018 10 08
Admin
OSS/ BSS
OSAM UI
Portal FW
Service Flow Mgr
OSAM DB
OSAM GW Adapter
OSAM Core Adapter
Cache
NAM Adapter Layer
SIMs
Supply Chain CPE DB
OSAM CORE
OSAM GW
PNF ACTIVATION
GIVEN that a SDSL pnd is deployed
WHEN the PNF has been activated
and the OSAM gateway has been activated
THEN the pnd will notify OSAM core via the OSAM gateway with the PNFId, PNF IP address, and GW IP address
and the pnd will obtain the current technology and speed profiles for the subscriber service offerings after a push is initiated (separate flow)
So that the PNF is known to OSAM
alt
[PNF Activation]
Register SDSL pnd on OSAM GW
Store PNFId, PNF IPAddress, GW IPAddress
PNFId, PNF IPAddress, GW IPAddress
Forward to OSAM CORE
Store SDSL pnd info
LOAD TECHNOLOGY AND SPEED PROFILES
GIVEN that technology and speed profiles have been defined for specific subscriber service offerings
WHEN the profiles, or updates to the profiles, are deployed into the network
THEN the technology and speed profiles are stored in the OSAM DB
So that profiles that are pushed to the PNFs are the current service offering definitions
alt
[Load Technology and Speed Profiles]
Create Profiles
Send to PF
Send profile configs
Store profiles
DISTRIBUTE TECHNOLOGY AND SPEED PROFILES
GIVEN that technology and speed profiles have been updated
and need to be distributed to some or all PNFs
WHEN the destination PNFs for the updated technology profiles are identified
THEN OSAM GWs supporting the selected PNFs are identified
And the technology profile updates are distributed to the PNFs through the OSAM GWs
So that the PNFs, can be selectably updated.
alt
[Distribute Technology and Speed profiles]
Get SDSL pnd PNFIds
Get SDSL pnd PNFIds
Get SDSL pnd PNFIds
SDSL pnd PNFIds
SDSL pnd PNFIds
SDSL pnd PNFIds
Select some or all SDSL pnds
Send list of SDSL pnd PNFIds
Send list of SDSL pnd PNFIds
Get list of PNFIds and PNF GW IPAddresses
loop
Send profile configs
Send profile configs
Send profile configs
Send profile configs
Profile Config Results
Profile Config Results
Profile Config Results
Profile Config Results
alt
[If Profile Config Success]
Store Profile Config
[If Profile Config Error]
Profile Config Results
Profile Config Results
Profile Config Results
RSYNC PNFId TO OSAM GW IP ADDRESS MAP
GIVEN that the OSAM GW is the path to a PNF
And the relationship between PNFs and OSAM GWs may get out of sync
WHEN the PNFId to OSAM GW IP address mapping is resynced
THEN the PNFs supported by each OSAM GW will be determined
And the PNFId to OSAM GW IP address mapping will be updated.
So that the OSAM DB maintains knowledge of the PNFs and their locations.
alt
[Resync PNFId to OSAM GW IP address Map]
Initiate Resync
Initiate Resync
Initiate Resync
Discover OSAM GW instances
OSAM GW instances
loop
[For Each OSAM GW]
Retrieve PNFIds and SDSL pnd IP addresses
Retrieve PNFIds and SDSL pnd IP addresses
Retrieve PNFIds and SDSL pnd IP addresses
Retrieve PNFIds and SDSL pnd IP addresses
PNFIds and SDSL pnd IP addresses
PNFIds and SDSL pnd IP addresses
PNFIds and SDSL pnd IP addresses
loop
[For Each PNFId]
Retrieve Current mapping for PNFId
alt
[If PNFId/OSAM GW IP Address Different]
Update PNFId to OSAM GW IP Address Map
Log Update
[If PNFId does not exist in OSAM DB]
Store PNFId to OSAM GW IP Address Map
Log Update
[If PNFId to OSAM GW IP Address From OSAM GW Matches]
alt
[From OSAM UI]
Return Result
Return Result
[From OSS]
Return Result
Return Result
PNF RESYNC PROVISIONING
GIVEN that a SDSL pnd has been deployed
And subscribers have been provisioned on the vSLT
And the pnd is damaged and is replaced or needs to be rebuilt
And the pnd retains it's PNFaDID
WHEN the PNF has been reactivated
and the OSAM gateway has been activated
THEN the pnd will notify OSAM core via the OSAM gateway with the PNFId, PNF IP address, and GW IP address
And the pnd will request a backup restoral
And the technology and speed profile definitions will be pushed to the pnd
And the subscriber provisioning will be pushed to the pnd
alt
[PNF Restore Provisioning]
alt
[From OSAM UI]
Request PNF Restore
Request PNF Restore
[From OSS]
Request PNF Restore
Request PNF Restore
Get speed and technology profile configs
Send profile configs
Send profile configs
Send profile configs
Send profile configs
Profile Config Results
Profile Config Results
Profile Config Results
Profile Config Results
alt
[If Profile Config Error]
Profile Config Results
Profile Config Results
Profile Config Results
[If Profile Config Success]
loop
[For each subscriber provisioned on the PNFId]
Get subscriber info
Send subscriber info
Send subscriber info
Send subscriber info
Send subscriber info
Subscriber Restore Results
Subscriber Restore Results
Subscriber Restore Results
Subscriber Restore Results
Subscriber Restore Results
Subscriber Restore Results
Admin
OSS/ BSS
OSAM UI
Portal FW
Service Flow Mgr
OSAM DB
OSAM GW Adapter
OSAM Core Adapter
Cache
NAM Adapter Layer
SIMs
Supply Chain CPE DB