

Output Management

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Agenda

- **Spool System Overview**
- **Basic Configuration Issues**
- **Extended Configuration Features with Release 4.0**
- **Frontend Printing**
- **Interface for External Output Management Systems**
- **Spool & Security**



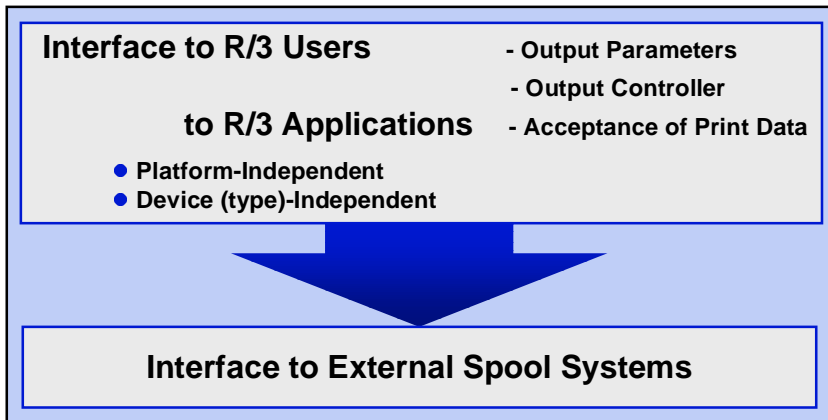
Agenda

- **Spool System Overview**
 - Task
 - Components
 - Printing
- Basic Configuration Issues
- Extended Configuration Features with Release 4.0
- Frontend Printing
- Interface for External Output Management Systems
- Spool & Security



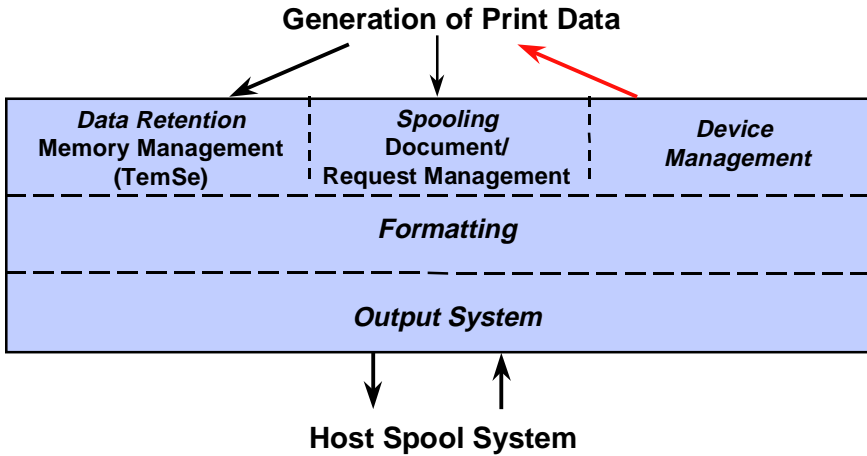
Spool System Overview

Task



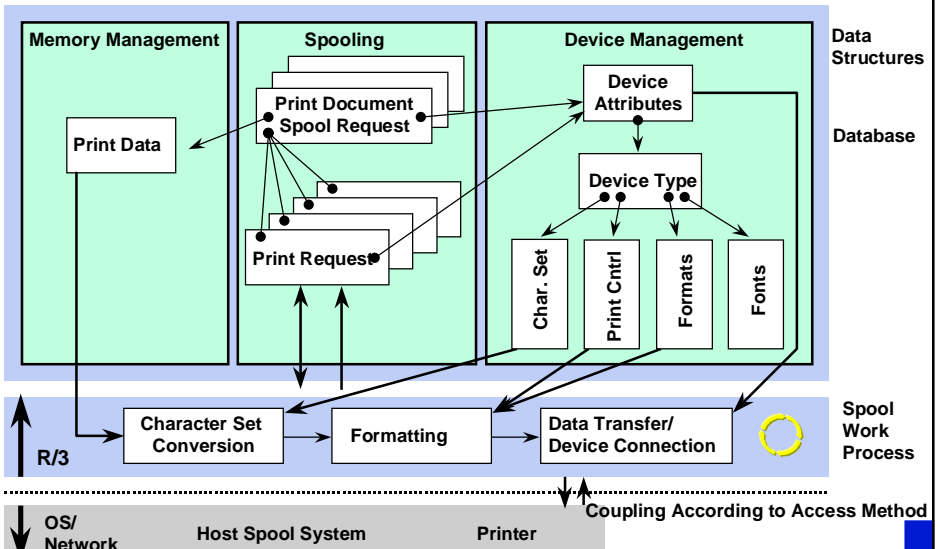
Spool System Overview

Components



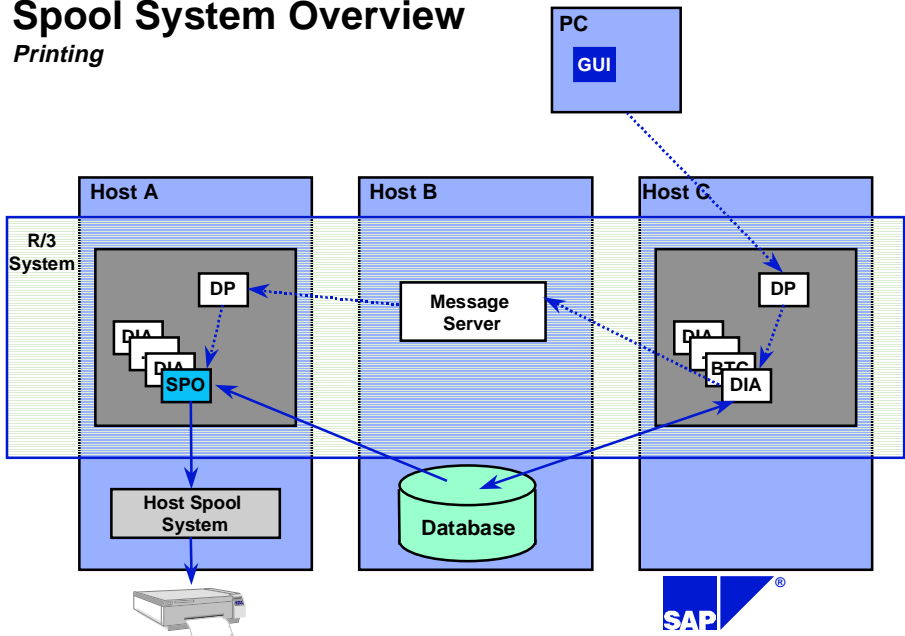
Spool System Overview

Components



Spool System Overview

Printing



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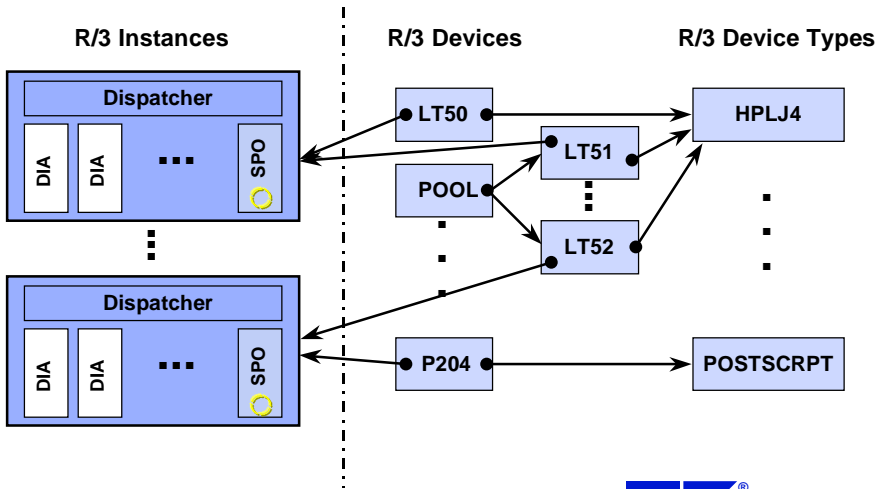
- Spool System Overview
- Basic Configuration Issues
 - R/3 Devices and Servers
 - Connecting external Devices
 - Classification
- Extended Configuration Features with Release 4.0
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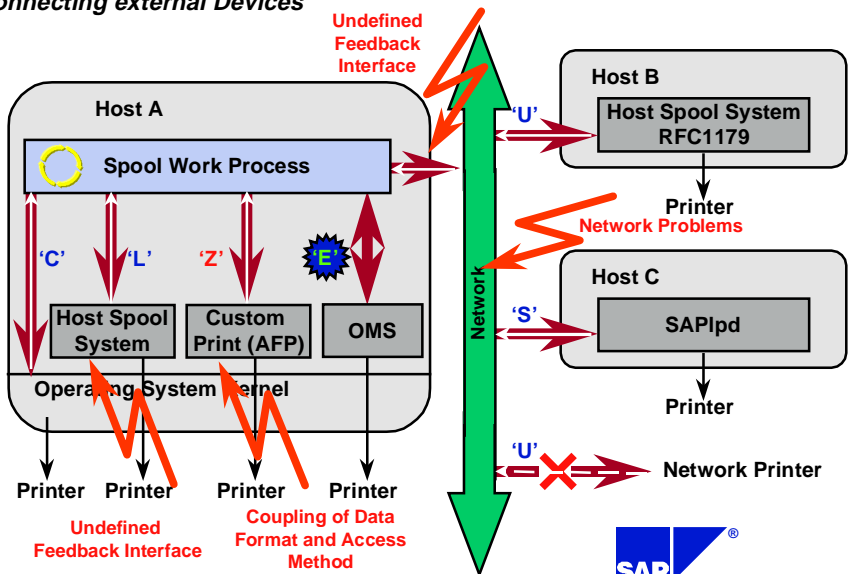
Basic Configuration

R/3 Devices and Spool Servers



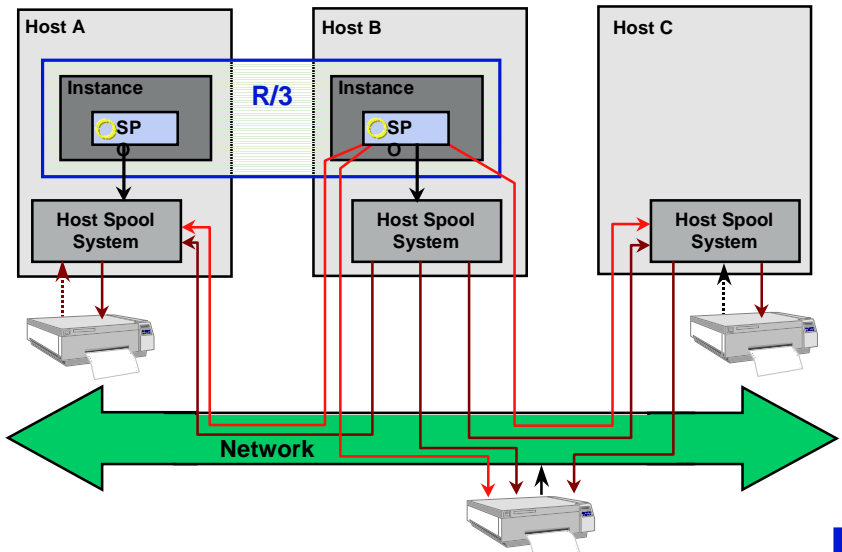
Basic Configuration

Connecting external Devices



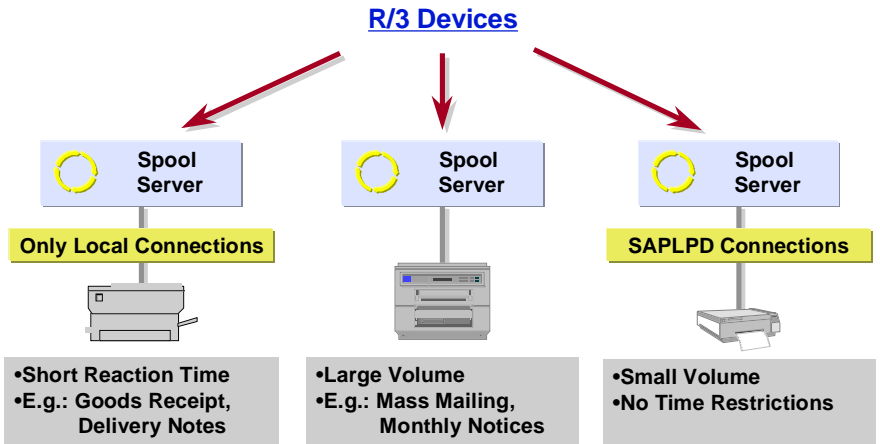
Basic Configuration

Connecting external Devices



Basic Configuration

Device and Server Classification



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- Spool System Overview
- Basic Configuration Issues
- **Extended Configuration Features with Release 4.0**
 - Device Configuration
 - Multiple Spool Work Processes per Server
 - Logical Server Landscape
- Frontend Printing
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Extended Configuration Features

Device Configuration



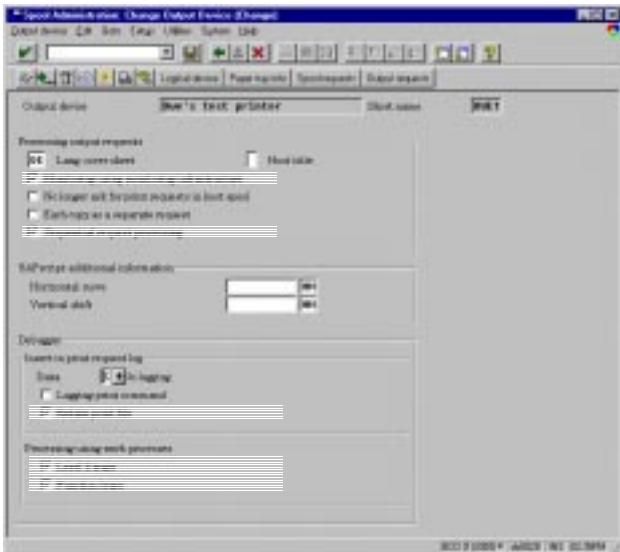
Extended Configuration Features

Device Configuration



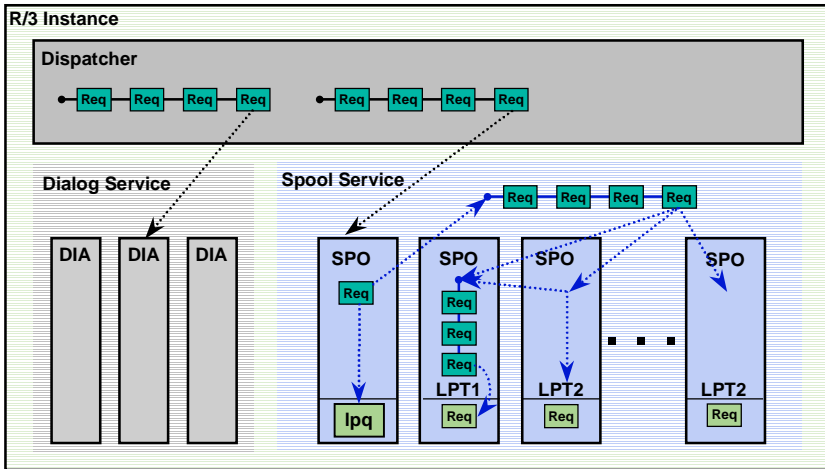
Extended Configuration Features

Device Configuration



Extended Configuration Features

Multiple Spool Work Processes



Extended Configuration Features

Logical Server Landscape

Problems with Server Assignment:

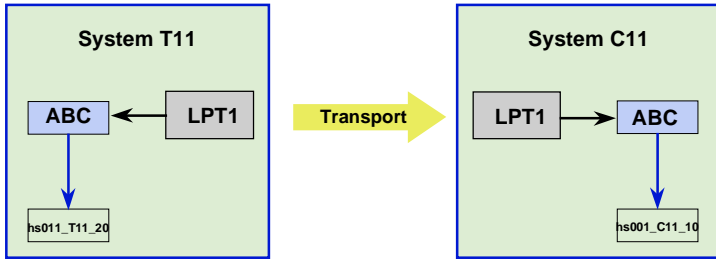
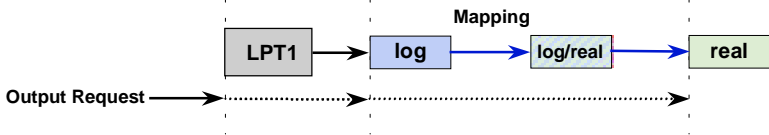
- Local system server name ⇒ Device cannot be transported
- Explicit redirection upon spool server breakdown ⇒ Original configuration lost
- Only complete redirection possible ⇒ No exceptions for local devices
- Exclusive server assignment ⇒ Only one server per device



Logical server and routing as general solution

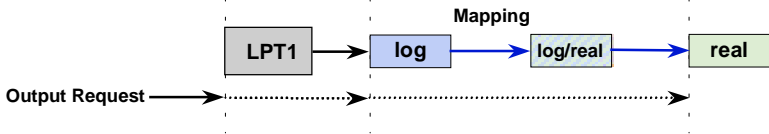
Extended Configuration Features

Logical Server Landscape

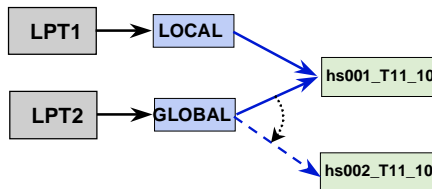


Extended Configuration Features

Logical Server Landscape



Explicit Redirection

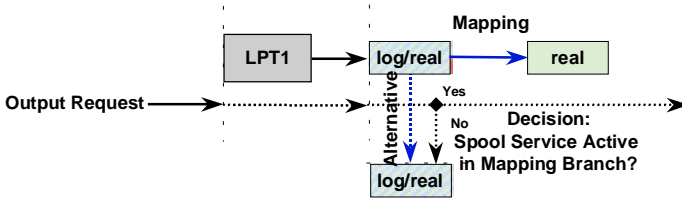


Extended Configuration Features

Logical Server Landscape

Alternative Server

Alternative in Event of Breakdown

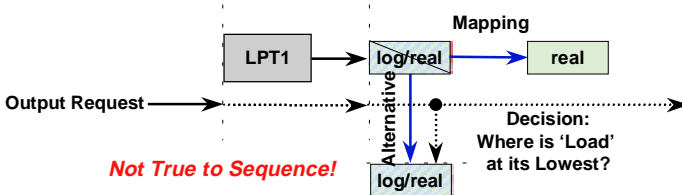


Extended Configuration Features

Logical Server Landscape

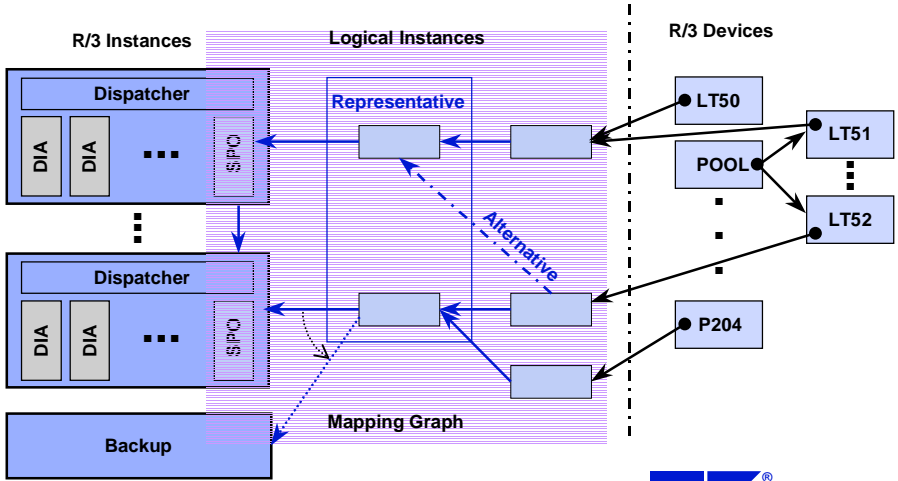
Alternative Server

Normal Alternative



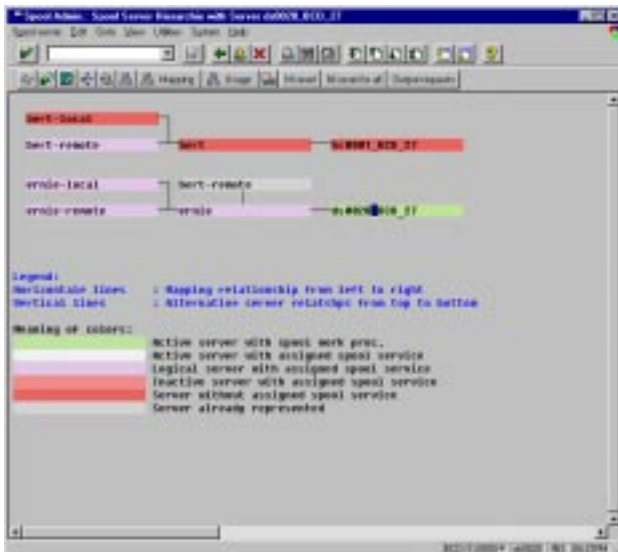
Extended Configuration Features

Logical Server Landscape



Extended Configuration Features

Logical Server Landscape



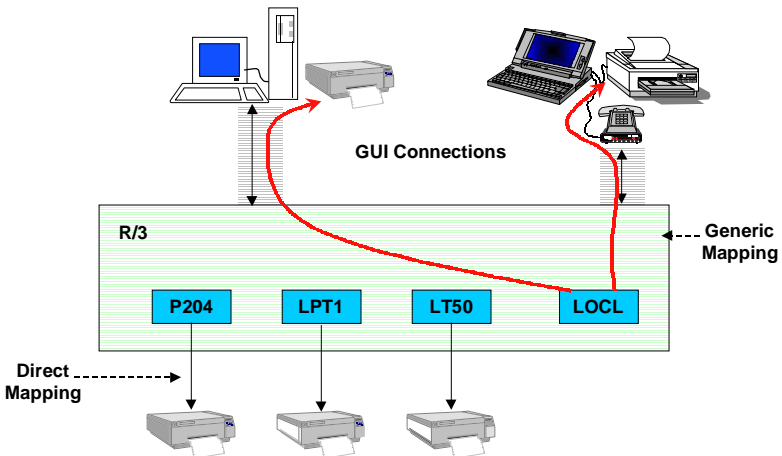
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Frontend Printing

Generic Printer



Frontend Printing

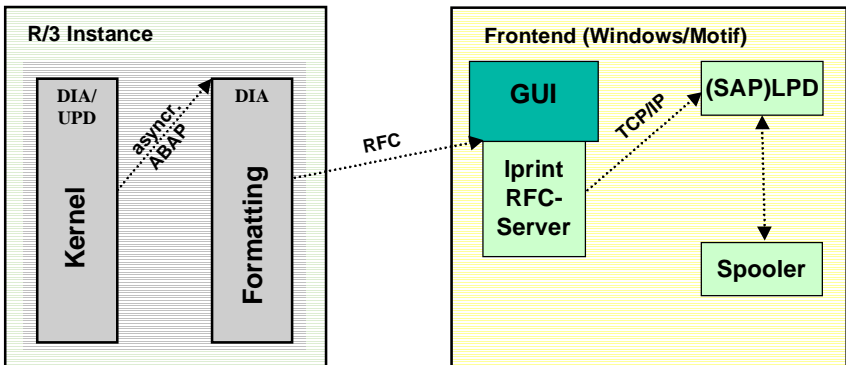
Prerequisites

- **Definition in SPAD**
 - Access Method 'F'
 - Generic host printer name '__DEFAULT'
- **Limitations**
 - Not usable for batch processing!!!
 - Uses dialog work process for formatting
 - Requires new session
 - (SAP)LPD service running on frontend
 - RFC Server 'lprint' installed in SAPGUI directory
 - Device type dependant



Frontend Printing

Standard Operation



Frontend Printing

Problems & Solutions

- **Problems** (*Hot Packages/Patches available for some releases*)
 - **Printing from update task** ⇒ 4.5A
 - ◆ **Limitation: Connection must still exist**
 - **Load for concurrent printouts too high** ⇒ 4.0B
 - ◆ **Single server per user/frontend**
 - **Code pages ≠ 1100 (Server or Frontend)** ⇒ 4.5A
 - **Connections through SAProuter** ⇒ 4.0A
 - ◆ **Printing integrated into SAPGUI (32 bit version)**
 - ◆ **Using download as fallback**



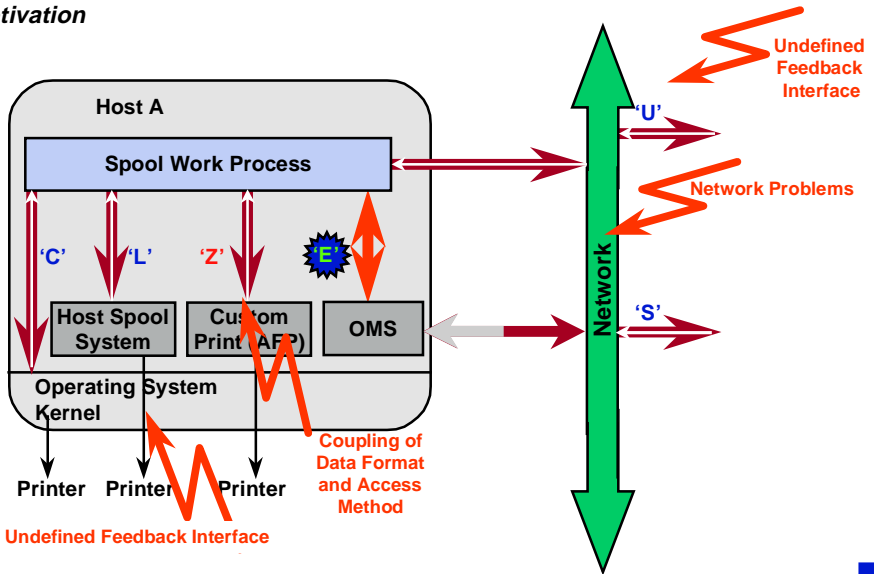
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External Output Management Systems

Motivation



External Output Management Systems

Interface Levels

Level 1

to solve:

- feedback problem
- correct final job status
- network problems

how: command line interface (corresponds to access method L)
with fully specified output formats for called commands

Level 2

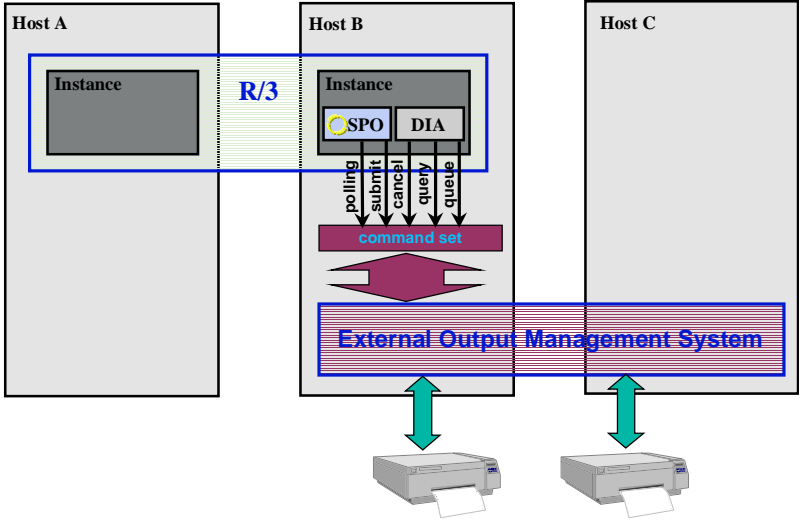
to solve:

- polling problem

how: active callbacks from the external output management system
to the R/3 system

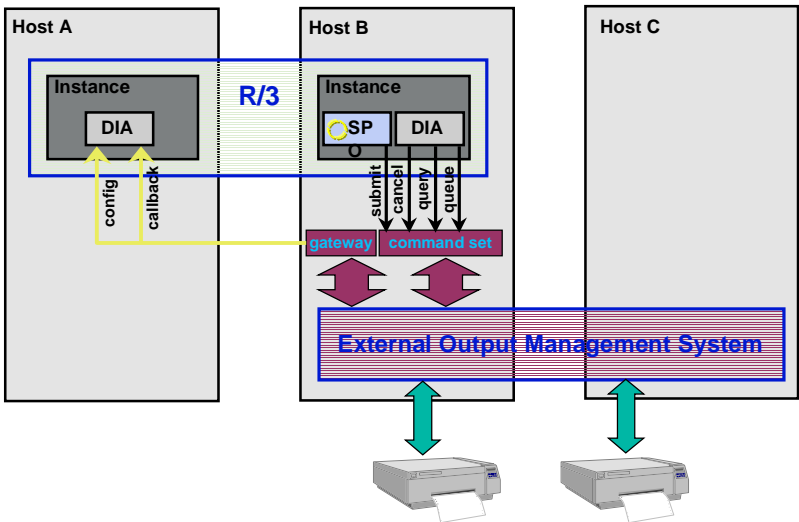
External Output Management Systems

Interface Level 1



External Output Management Systems

Interface Level 2

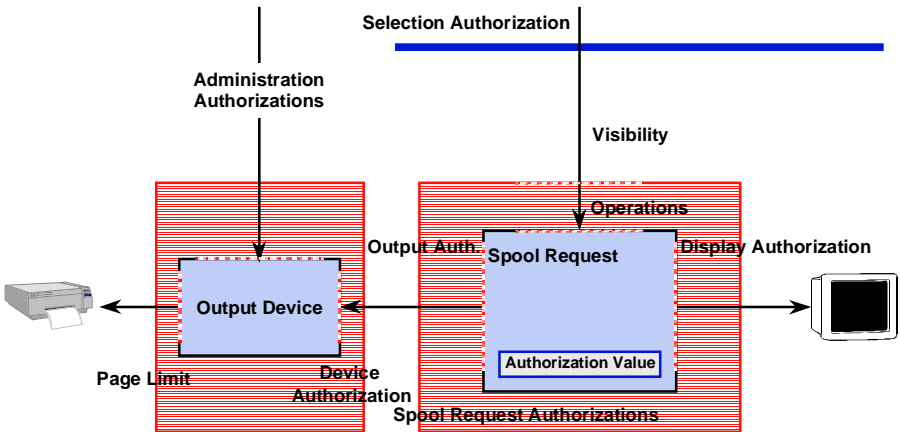


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Spool & Security



Spool & Security

- **Device authorization**
- **Selection authorization**
- **Spool request authorization**
 - Specification of authorization value in spool request
 - Automatic replacement of initial value by owner
 - Automatic granting of all authorizations for the user name as authorization value
 - Global authorization for other clients
 - Customer exit for enhancement
- **Page limit**
 - Profile parameter rspo/auth/pagelimit=1
 - Authorization for ranges (e.g. 0000000000 - 0000000010)

Miscellaneous

- **Generic device type SAPGOF**
- **Accounting**
- **30-digit device names**
- **New layout of the maintenance interface (SPAD)**
 - Where-used list
 - Connection to transport and correction system
- **Extension of possible spool number range to 2 billion**
- **Page-specific selection of formatting**
- **List Driver (4.5A)**
- **Connection Test (4.5A)**



Miscellaneous

Connection Check

- **Used for access methods ,U‘ and ,S‘**
- **Disable device if a connection problem is detected**
 - Start periodic connection check
 - All further requests for this hostspool will be delayed
 - Reactivate all jobs after successful test
- **Stop connection check after three retries**
 - Jobs are still delayed
 - Restart connection check
 - ◆ If explicitly requested using SPAD
 - ◆ If new job is coming in

```
rspo/host_spool/checking=1  
rspo/host_spool/check_retries=3  
rspo/tcp/retrytime=300
```



Miscellaneous

Multiple Spool Work Processes

- **Tasks of the spool service of an R/3 instance**
 - Printing
 - Status query
 - Connection check (4.0B)
 - Global management tasks
 - ◆ Job redirection
 - ◆ Spool scan for lost jobs
 - ◆ Spool reorganization (also done by RSPO0041) (4.6A)
- **Each task besides printing handled exclusively**
 - With 4 Spool WPs processing of print requests guaranteed (4.0B)

