

SAP ARCHITECTURE BLUEPRINT

JULY 2006

Edited by XU Product Architecture Knowledge Transfer

PROJECT NAME / SUBJECT:	SAP JVM			
SPONSOR/PROJECT INITIATOR:	SAP JVM team			
PROGRAM/PROJECT LEAD:	THOMAS SMITS/GUIDO DERWAND			
LEAD ARCHITECT:	N/A			
DEVELOPMENT: ☑ SAF	PLabs, mainly in Walldorf Partner/ISV			

I. MARKET AND PRODUCT BACKGROUND

Planned product release date: SAP NetWeaver New York City timeframe

Underlying SAP NetWeaver release: SAP NetWeaver New York City

Used SAP NetWeaver stacks: □ ABAP **☑** J2EE

Target platform (OS, DB):

Platforms	Linux	Windows	Solaris	HP-UX	AIX	OS/400
x86_64	✓	✓	✓			
IA32	✓	✓				
IA64	✓	✓		✓		
PowerPC	✓				✓	✓
PA-RISC				✓		
zSeries	✓					
Sparc			✓			

Targeted market segments / sub-segments:

All segments targeted by SAP's Java stack.

Use cases targeted by the product:

- all use cases were Java is involved:
- all use cases targeted by SAP's Java stack

Strategic goals SAP wants to achieve with the product:

- Independence from Java VM vendors
- Robustness
- Supportability
- Inhouse development effectiveness

Mandatory product capabilities to address goals, use cases and target market:

- Same behaviour on all OS & hardware platforms
- Faster failover in comparison with 3rd party VMs (copy-only Shared Closures)
 More flexible debugging in comparison with 3rd party VMs (Debugging on Demand)
- Increased runtime monitoring capabilities in comparison with 3rd party VMs (gc statistics, extended stack trace, deadlock tracing etc)
- Increased memory and performance profiling capabilities in comparison with 3rd party VMs

II. ARCHITECTURE

For further details and information see: SAP Virtual Machine Container Homepage (http://vmcontainer.wdf.sap.corp:1080/)