

Sun™ N1 Advanced Architecture Builder, Deployer, and Analyzer for SAP Solutions



Highlights

- Helps IT staff introduce and control a smarter SAP system landscape via the Sun™ N1 Service Provisioning System virtualization methodology
- Provides live system data on the entire landscape enabling smarter decisions regarding resource optimization
- Reduces complexity by automating processes within a single GUI
- Shortens time to market by making changes to the SAP NetWeaver environment quickly, easily, and with less risk
- Works hand-in-hand with the Adaptive Computing Controller and enhances its capabilities
- Provides all of the capabilities of SAP's Adaptive Computing and more — without Adaptive Computing



To stay competitive, nearly every enterprise needs to make informed business decisions and develop better applications and more sophisticated customer interactions using business intelligence, thus creating a smarter enterprise. But for a truly smart enterprise, the same concepts need to apply to the IT infrastructure — using system intelligence to make more informed computing decisions to support the ever-changing demands of the business. On the other hand, in today's global economy, making changes to components in an SAP NetWeaver environment can be a risky endeavor. And yet, changes must occur to incorporate new functionality and business processes, to accommodate growth, and to increase the utilization of resources and return on investment. IT managers need tools to help them make smarter decisions and make changes to the SAP infrastructure quickly, easily, and with little risk to production systems.

Sun™ N1 Advanced Architecture for SAP Solutions

The N1 Advanced Architecture for SAP Solutions is designed to provide exactly those tools, utilizing Sun N1 Service Provisioning System pre-built modules and Sun Java™ Availability Suite to help IT managers manage changing SAP environments. It consists of a customized Java technology-based Web browser interface, called the N1 Advanced Architecture Manager, and three core modules — N1 Advanced Architecture Builder, N1 Advanced Architecture Deployer, and N1 Advanced Architecture Analyzer — that transform the entire SAP infrastructure and

the data center into a virtual system. The performance of this virtual system is continually monitored, controlled, and managed. And, changes occur quickly with a minimum of effort or risk.

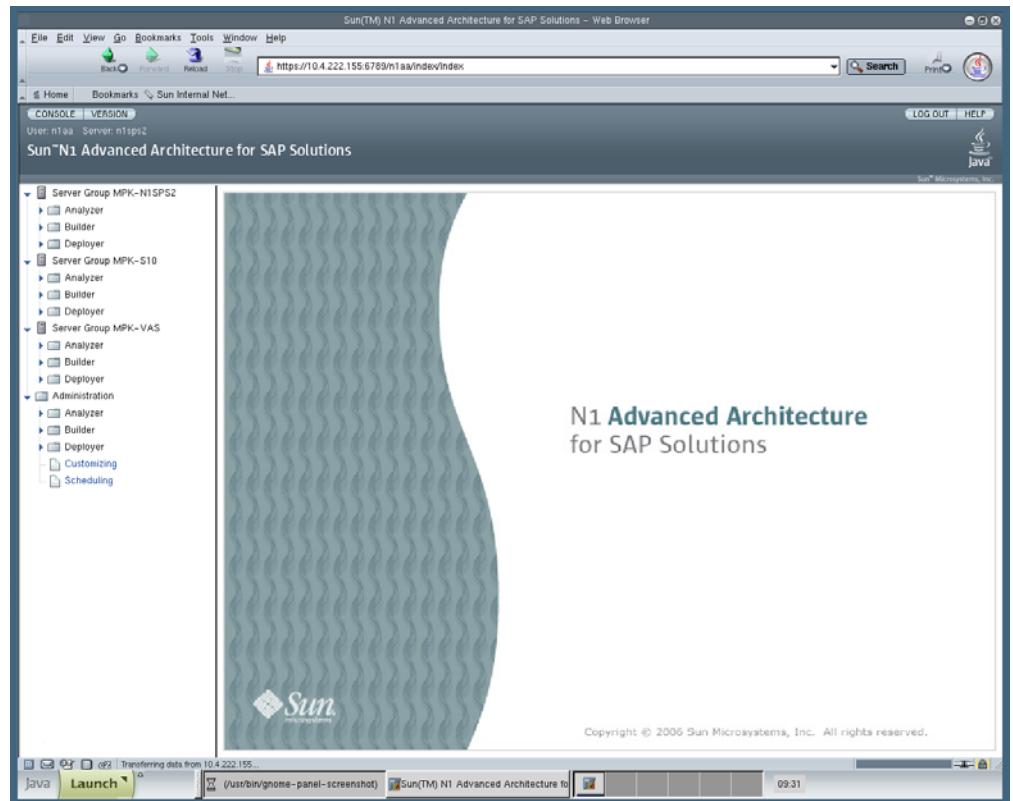
With the N1 Advanced Architecture for SAP Solutions, IT operators can deploy, provision, manage, and change pools of resources and application services, and analyze the environment — all from a single Web browser interface — delivering more business flexibility through virtualization, application and resource provisioning, monitoring, and central management.

N1 Advanced Architecture Builder

The N1 Advanced Architecture Builder and the N1 Advanced Architecture Deployer described below are the tools that help IT staff make changes quickly, easily, and with little risk. The N1 Advanced Architecture Builder employs N1 Service Provisioning System pre-built models for OS provisioning to quickly provision servers into an SAP environment from a bare metal state.

The pre-built models within the N1 Advanced Architecture Builder enable IT operators to build, configure, and update multi-tier application service models for many data center applications (including models for the operating systems, patches, and client software such as backup software or the N1 Advanced Architecture client), all from a single GUI. The models are stored and centrally administered, and can be configured for different environments. For example, one model for a database system can be modified slightly to create separate models for development, test, and production systems.

The N1 Advanced Architecture Builder can also help reduce risk by enabling changes, such as software maintenance releases, to be applied and tested on the model before they are applied to the production system. Once the updated model is in a stable state, it can be deployed with the N1 Advanced Architecture Deployer to the appropriate system during a scheduled maintenance period, dramatically decreasing the risk of changing and updating systems.



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N1 Advanced Architecture Deployer

This module enables IT operators to deploy, configure, and update application services all from the N1 Advanced Architecture Manager. At the touch of a button, it automatically checks application dependencies, deploys needed software from a central repository, configures applications based on a pre-defined model, and logs all actions.

The N1 Advanced Architecture Deployer incorporates an N1 Service Provisioning System pre-built model for SAP NetWeaver that is SAP certified to integrate with the Adaptive Computing Controller for start, stop, and relocate functionality. It also provides these capabilities on its own to manage other applications in the data center. Thus, it enhances the capability of SAP's Adaptive Computing for SAP environments and offers similar functionality to other data center applications where Adaptive Computing does not apply.

Because this module is certified to integrate with the Adaptive Computing Controller, it can be used to move SAP applications to other servers in a safe and simple way. For example, the model for an application can be easily deployed to a larger system if the application requires more resources than originally planned.

By eliminating manual, repetitive tasks, this module enables organizations to simplify complex software installation, configuration, and change, thus accelerating service deployment times, increasing flexibility, and reducing operating expenses and risk.

N1 Advanced Architecture Analyzer

In a systems environment information on the current utilization of resources is the starting point for making smarter decisions. The N1 Advanced Architecture Analyzer continually monitors, collects, and displays CPU and memory utilization data on all of the servers and applications in the environment — including applications other than SAP. The data is collected from Solaris™ Resource Manager on the client systems and is more granular (not compressed) than the standard data that is collected within SAP itself. The data is then stored in a very small central database and the analyzer process is a light-weight tool that consumes negligible computing resources, so there is virtually no impact on the systems for which data is collected.

Once the data is collected, it is accessed and evaluated via the Landscape Utilization View in the N1 Advanced Architecture Manager, providing a complete load distribution overview of the SAP landscape on a per server basis. In addition, the IT operator can view the resource distribution of each server in terms of CPU or memory to discover how much of each resource individual applications or users are utilizing. With this information IT staff can use the shares facility in Solaris Resource Manager to automatically allocate the appropriate resources to applications running on the same

system — when and where they are needed. The data can also be examined to identify trends such as irregular increases in CPU utilization, which can then be addressed at an early stage to prevent performance bottlenecks.

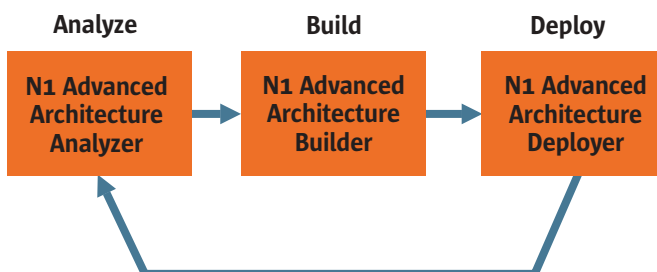
A unique feature of the N1 Advanced Architecture Analyzer is the ability to normalize utilization data to compare all data at the same level. For example, if the database instance is running on an UltraSPARC® IV processor-based system and the application server is running on an UltraSPARC III processor-based system, the load data can be normalized to eliminate the CPU value to produce a generic load value for each application. This type of data is especially useful when planning to add systems, move to new systems, or to consolidate multiple applications onto a single system.

The N1 Advanced Architecture Analyzer can help IT staff make smarter decisions regarding:

- Planning — using real utilization data to decide where to deploy and locate SAP applications
- Optimizing — optimally allocating processes and resources based on current needs
- Billing — tracking which resources are used and by whom

- Reporting — providing a complete audit trail of resource and service use to internal or external customers

A Smarter Process



Conclusion

Today the IT infrastructure does not just support the business, it's an integral part of the business that must be adaptable to provide high performance, availability, and cost-effectiveness. To deliver the flexibility required to be competitive, enterprises look for partners who intimately understand their challenges and collaborate to provide solutions to address them. Sun and SAP have been partnering for years to do just that, providing innovative, cost-effective, end-to-end solutions to help companies drive growth.

With the N1 Advanced Architecture for SAP Solutions, IT staff can gain better intelligence about their SAP NetWeaver systems and application services and have broader capabilities for keeping them running optimally. At Sun, we call that a truly Smarter Enterprise.

Learn More

To learn more about Sun's N1 Advanced Architecture for SAP Solutions, see www.sun.com/sapn1aa