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Pre-Advisory Name: SAP RFC_START_PROGRAM RFC Function Multiple Vulnerabilities

Vulnerability Class: Buffer Overflow, Information Disclosure

Release Date: 2007-04-03

Affected Applications:

- SAP RFC Library 6.40
- SAP RFC Library 7.00

Affected Platforms:

- AIX 32bit
- AIX 64bit
- HP-UX on IA64 64bit
- HP-UX on PA-RISC 64bit
- Linux on IA32 32bit
- Linux on IA64 64bit
- Linux on Power 64bit
- Linux on x86_64 64bit
- Linux on zSeries 64bit
- Mac OS
- OS/400
- OS/400 V5R2M0
- Reliant 32bit
- Solaris on SPARC 32bit
- Solaris on SPARC 64bit
- Solaris on x64_64 64bit
- TRU64 64bit
- Windows Server on IA32 32bit
- Windows Server on IA64 64bit
- Windows Server on x64 64bit
- z/OS 32bit

Local / Remote: Remote

Severity: High

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Vendor Status:

- Confirmed. Updates Released.

Reference to Vulnerability Disclosure Policy:

http://www.cybsec.com/vulnerability_policy.pdf

Product Overview:

“The RFC Library offers an interface to a SAP System. The RFC Library is the most commonly used and installed component of existing SAP Software. This interface provides the opportunity to call any RFC Function in a SAP System from an external application. Moreover, the RFC Library offers the possibility to write a RFC Server Program, which is accessible from any SAP System or external application. Most SAP Connectors use the RFC Library as communication platform to SAP Systems.”

RFC_START_PROGRAM RFC Function enables the execution of operating system programs on RFC-enabled components. This function is installed by default in every external RFC server.

Vulnerability Description:

It is possible to remotely obtain information about external RFC server configuration. Besides, a buffer overflow vulnerability in the processing of user input has been detected.

Technical Details:

Technical details will be released three months after publication of this pre-advisory. This was agreed upon with SAP to allow their customers to upgrade affected software prior to technical knowledge been publicly available.

Impact:

These vulnerabilities may allow an attacker to remotely obtain information about RFC server configuration and to remotely execute arbitrary commands over vulnerable external RFC servers.

Solutions:

SAP has released patches to address these vulnerabilities. Affected customers should apply the patches immediately. More information can be found on SAP Notes 1004084 and 1003908.

Vendor Response:

- 2006-11-21: Initial Vendor Contact.
- 2006-12-01: Vendor Confirmed Vulnerability.
- 2006-12-11: Vendor Releases Update for version 6.40.
- 2006-12-11: Vendor Releases Update for version 7.00.
- 2007-04-03: Pre-Advisory Public Disclosure.

Special Thanks:

Thanks goes to Victor Montero and Gustavo Kunst.

Contact Information:

For more information regarding the vulnerability feel free to contact the author at [mnunez <at> cybsec <dot> com](mailto:mnunez@cybsec.com).

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