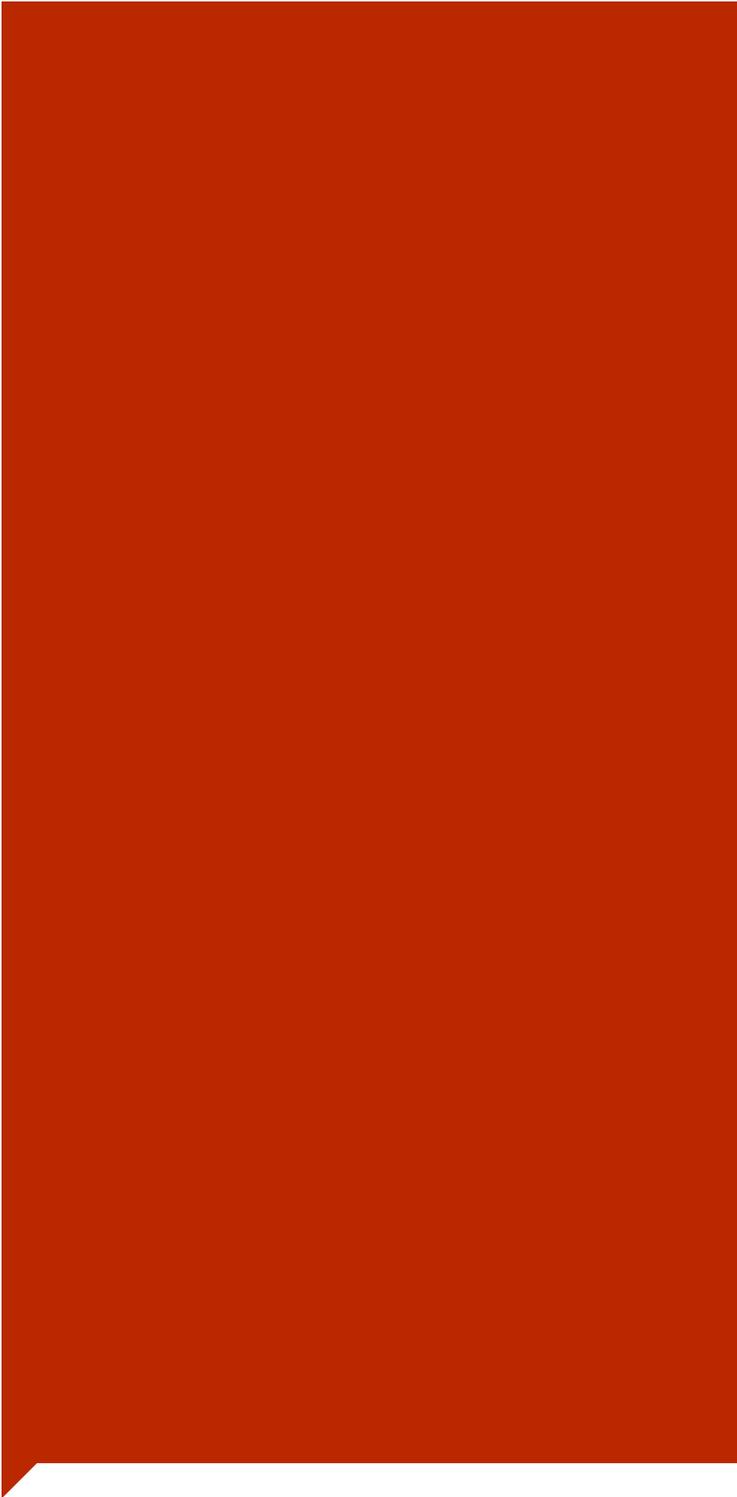


Layer Seven Security

SAP Security Notes
December 2013



SAP announced an important change to the release strategy for security patches in December. In order to respond more rapidly to externally reported vulnerabilities and critical security-related programming errors discovered through internal quality assurance efforts, Security Notes will no longer be released for most lower priority 3 and 4 vulnerabilities. Patches for such issues will be delivered primarily with support packages. Therefore, given that corrections for all security vulnerabilities are not provided exclusively through Security Notes, customers are advised to implement support packages as soon as they are available at the SAP Service Marketplace to maintain patch levels for SAP systems.

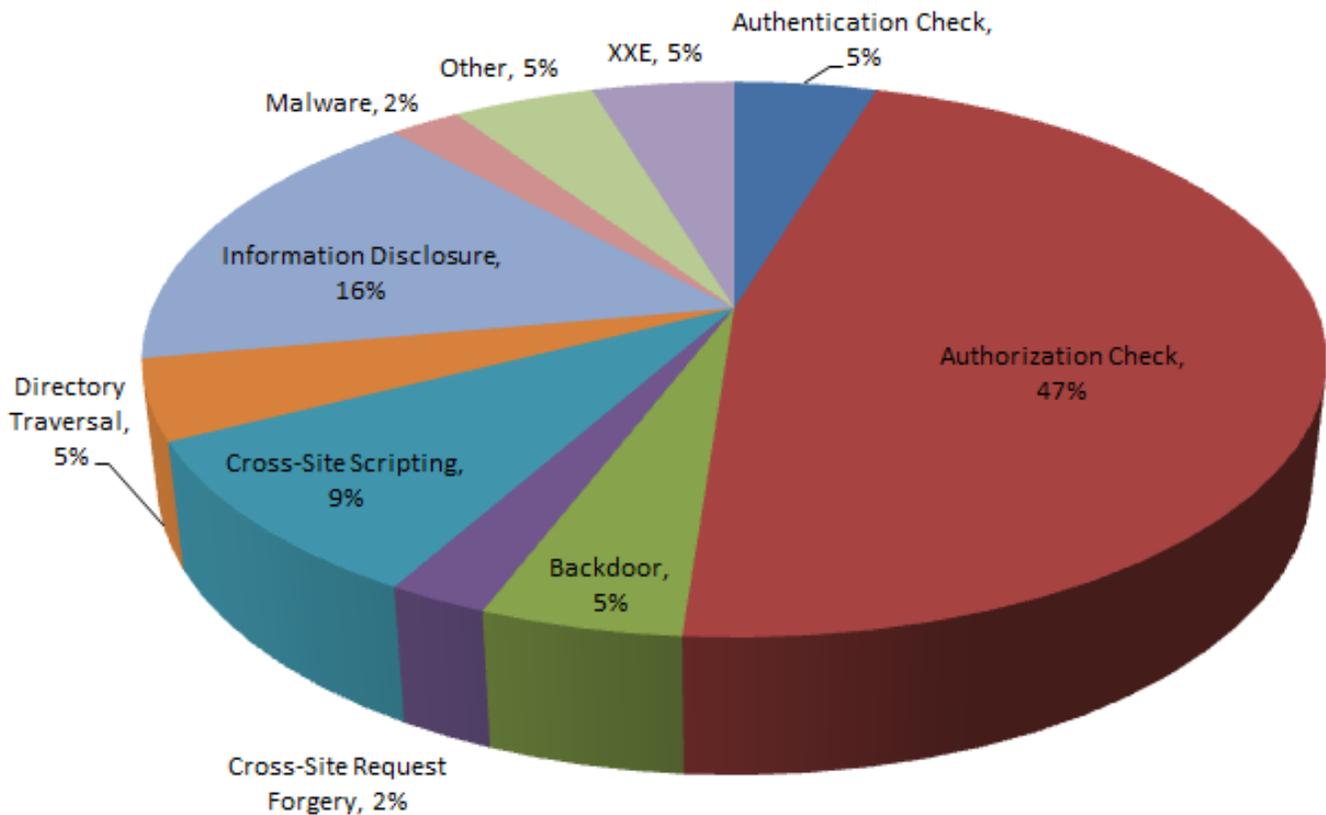
SAP also introduced a new rating scale for Security Notes in December. The previous four-tier priority model was replaced by a simplified three-tier approach. Security patches are now rated on a high-medium-low scale.

The catalyst for the changes may have been the variant of the carberp malware targeting SAP clients that was disclosed in November. The malware is capable of logging keystrokes and capturing screenshots which could lead to the theft of user credentials and other sensitive information related to SAP systems. The need to respond quickly to such a well-publicised event may have extended the already stretched security resources at SAP.

Note 1946009 includes numerous recommendations from SAP to counter the threat posed by the malware. This includes updating anti-malware and IPS signatures, restricting the administrative privileges of end users on local machines, installing OS patches and updates, enabling single sign-on, network and host-level firewalls, disabling AutoRun features, and avoiding the use of non-complex passwords across multiple systems and accounts.

SAP Security Notes

December 2013



SAP Security Notes by Vulnerability Type

Since the malware targets front-end SAP clients, customers should also consider hardening security policies for SAP GUI including disabling user scripting and input history, limiting multiple logons and enabling strong filtering rules in the SAP GUI security module.

Other important Notes include 1752717. This extends the Cross-Site Request Forgery (XSRF) Protection Framework to a component within the Manufacturing module that uses Servlets, JSPs and other Java specifications. The Framework was introduced in 2010 to combat XSRF attacks that attempt to send requests through compromised browsers to application servers using the credentials of trusted users. Applications that rely exclusively on automatically submitted credentials such as session cookies, certificates or username/password combinations are vulnerable to this

form of attack since they are unable to distinguish between legitimate and malicious requests. The Framework applies tokens as an additional parameter to protect against XSRF attacks. The token is generated after logon and bound to the user session. Implementation instructions for the Framework are attached to Note 1450166.

Note 1931016 patches missing authorisation checks in the ABAP Runtime Analysis by introducing an S_TCODE check for transactions including SE30, SE30_OLD and SAT. The ABAP Runtime Analysis is a component of the ABAP Workbench used for source code performance analysis.

Missing authorization checks in other critical components are addressed by Notes 1773912 (message server), 1906927 (Accounting BAPIs) and 1776718 (password telnet command).

Appendix: SAP Security Notes, December 2013 1/2

| PRIORITY | NOTE | AREA | DESCRIPTION |
|----------|---------|-------------------|--|
| HIGH | 1956501 | PE-LSO-LPO | Update #1 to security note 1687668 |
| HIGH | 1882597 | GRC-SAC-ARQ | UAM: End user login authentication not working properly |
| HIGH | 1735125 | SV-SMB-AIO-PFW-SB | Unauthorized modification of displayed content in BP-INSTASS |
| HIGH | 1808706 | SBO-IMCE-COM | Unsecured data transmission method in B1A |
| HIGH | 1946009 | XX-SER-SPD | Front-End Malware can Potentially Harm SAP Installations |
| HIGH | 1942511 | EHS-MGM-INC | Missing authorization check in Incident Management |
| HIGH | 1934633 | XX-PROJ-FI-CA | Missing authorization check in FI-CA |
| HIGH | 1752717 | MFG-LPO | Unauthorized usage of application functionality in MFG-LPO |
| HIGH | 1756472 | BC-XI-CON-AFW | Update 2 to Security Note 1723641 |
| HIGH | 1896988 | BC-TWB-TST-P-PA | Missing Authorization Check in ST05 |
| HIGH | 1900200 | BC-SRV-ARL | Directory traversal in BC-SRV-ARL |
| HIGH | 1802724 | BW-BEX-ET-WJR-RT | Unauthorized modification of displayed content in BW-BEX |
| HIGH | 1906927 | AC-INT | Missing authorization check in Accounting BAPIs |
| HIGH | 1931016 | BC-DWB-TOO-RTA | Missing authorization check in ABAP Runtime Analysis |
| HIGH | 1852146 | BC-WD-UR | Potential information disclosure relating to the Portal |
| HIGH | 1773912 | BC-CST-MS | Missing authorization check in message server |
| HIGH | 1862392 | PS-MAT-PRO | Missing authorization check in PS-MAT-PRO |
| HIGH | 1776718 | BC-JAS-SEC | Missing authorization check in password telnet command |
| HIGH | 1866296 | IS-B-BCA-MD | Missing authorization check in IS-B-BCA |
| HIGH | 1782753 | BC-MUS-KFM | Missing whitelist check for Key Figure Calculation report |
| HIGH | 1908647 | BI-RA-EXP | cross site flashing |
| HIGH | 1908562 | BI-RA-EXP | Potential information disclosure relating to SBOP Explorer |
| HIGH | 1909770 | FIN-FSCM-COL | Missing whitelist check in SAP Collections Management |
| HIGH | 1909858 | CA-GTF-WFM | Missing whitelist check in CA-GTF-WFM |

Appendix: SAP Security Notes, December 2013 2/2

| PRIORITY | NOTE | AREA | DESCRIPTION |
|----------|---------|----------------|---|
| HIGH | 1793359 | LO-MD-BP-VM-ES | Missing authorization check in Supplier Enterprise Service |
| HIGH | 1911523 | BC-CCM-PRN | Hard-coded credentials in Backend Printing |
| HIGH | 1913554 | BC-ESI-BOF | Hard-coded credentials in Suite BOPF |
| HIGH | 1917054 | CRM-BTX-GWI | Untrusted XML input parsing possible in CRM-BTX-GWI |
| HIGH | 1925908 | CRM-ISA-BBS | Missing authorization check in CRM-ISA-BBS |
| HIGH | 1926485 | BC-CCM-MON-SLG | Missing authorization check in application "Edit System Log and Security Audit Log Messages"; |
| HIGH | 1927859 | BC-SYB-ASE | Missing authentication check in SAP Sybase ASE |
| MEDIUM | 1706769 | FS-RI | Missing authorization check in FS-RI |
| MEDIUM | 1956812 | SCM-APO-ATP | Update #1 to security note 1425123 |
| MEDIUM | 1768656 | BC-XI-IBC | PI SEC: Unauthorized modification of displayed content in PI |
| MEDIUM | 1739529 | BC-XI-IBF | Potential information disclosure relating to passwords |
| MEDIUM | 1819139 | BC-CST-LL | Missing authorization check in SAP Kernel |
| MEDIUM | 1661551 | SRM-EBP-CAT | Potential information disclosure relating to SRM-MDM Catalog |
| MEDIUM | 1661781 | SRM-CAT-MDM | Potential information disclosure relating to SRM-MDM |
| MEDIUM | 1896642 | BC-MID-ALE | Potential information disclosure relating to Integration Technology ALE |
| MEDIUM | 1929338 | BC-CCM-SLD-ABA | Potential information disclosure relating to System Landscape Directory ABAP Connectivity |
| MEDIUM | 1785662 | SD-BIL-IV-IF | Directory-Traversal in externer Fakturaschnittstelle |
| MEDIUM | 1942432 | FI-LA | Missing authorization check in FI-LA |
| LOW | 1831266 | BC-XI-IS | Missing authorization check in BC-XI-IS |



Layer Seven Security empowers organisations to realize the potential of SAP systems. We serve customers worldwide to secure systems from cyber threats. We take an integrated approach to build layered controls for defense in depth

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