Security Advisory Report - OBSO-1403-02

OpenStage / OpenScape Desk Phone IP - Authentication Bypass Vulnerability in WPI Default Mode (CVE-2014-2651)

Creation Date: 2014-03-28
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Summary

A vulnerability in the Default Mode of the WPI (Workpoint Interface) implementation in OpenStage and OpenScape Desk Phone IP SIP before V3 R3.11.0 allows unauthorized remote attackers to bypass a legitimate provisioning service (such as the OpenScape Deployment Service - DLS).

The risk is rated

- high for SIP in versions V3 before V3 R3.11.0
- low for SIP in versions < V3
- low for OpenStage HFA

A phone is not affected if it is operated in Secure Mode of the WPI.

Vulnerability Details

In Default Mode of the WPI, OpenStage and OpenScape Desk Phone IP phones only connect to the legitimate provisioning service (DLS) as configured in the associated DHCP configuration (vendor class "OptiPhone", option OpenStage.dls "sdhp://<dls-ip-address>:18443"). By sending a specially crafted https request, attackers may however be able to direct a phone to a different IP address than provided in the DHCP configuration. This may enable a rogue DLS to reconfigure the phone.

Phone versions V2 Rx.x.x are only affected with low impact: attackers may only be able to disconnect a phone from the legitimate DLS, but not to redirect them to a rogue DLS; the situation can be resolved from either the legitimate DLS server side, or by restarting the phone.

CVSS Scores:

- SIP V3: Base Score 9.3, Temporal Score 7.7
  (AV:N/AC:M/Au:N/C:C/I:C/A:C/E:F/RL:OF/RC:C)
- SIP/HFA V2: Base Score 2.9, Temporal Score 2.6
  (AV:A/AC:M/Au:N/C:N/I:N/A:P/E:F/RL:W/RC:C)

Mitre (cve.mitre.org) has assigned the id CVE-2014-2651 to this issue.

Affected Products

The following VoIP phones of Unify are affected with high risk:

- OpenStage SIP V3, all models except OpenStage 5
- OpenScape Desk Phone IP SIP V3, all models

The following VoIP phones of Unify are affected with low risk:

- OpenStage HFA V2
- OpenStage SIP V2. Note that OpenStage SIP V2 has already achieved End of Support.

OpenStage HFA V3 is not affected.

Recommended Actions

Install the following releases (or later versions) to resolve the vulnerability:

- OpenStage / OpenScape Desk Phone IP SIP: V3 R3.11.0 (release date: 2014-03-28)
- OpenStage HFA: V2 R1.5.1 (release date: 2014-03-28)
General recommendation: evaluate the possibility to enable Secure Mode at the WPI between the Phones and the provisioning service (DLS). This adds an additional layer of security by certificate-based authentication of the service at the TLS protocol level.

References

CVE ID: [http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-2651](http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-2651)


Revision History

Initial release: 2014-03-28