

Dell EMC PowerEdge – iDRAC Automatic Certificate Enrollment

Tech Note by

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Summary

In the latest generation of Dell EMC PowerEdge Servers, iDRAC v4.0, has implemented a new automated security feature to keep your iDRAC SSL/TLS certificates current.

The iDRAC's Automatic Certificate feature automatically assures SSL/TLS certificates are in place and up-to-date for both bare-metal and previously installed systems.

Introduction

Dell EMC PowerEdge server's Integrated Dell Remote Access Controller (iDRAC) v4.0 offers a new security feature, Secure Sockets Layer (SSL) / Transport Layer Security (TLS) Automatic Certificate Enrollment that helps the Data Center Manager maintain security with less effort.

Data Center Managers need to be vigilant to make sure that their compute environment is protected from a range of threats and attacks. Monitoring and assuring that all security measures are current and in place is time-consuming and imperative to prevent unauthorized access and manipulation of your servers.

iDRAC Web User Interface and SSL/TLS Certificates

The iDRAC enables remote system management and reduces the need for physical access to the system. The iDRAC Web User Interface can be reached with any supported browser and uses an SSL/TLS certificate to authenticate itself to web browsers and command-line utilities running on management stations thereby establishing an encrypted link.

If the Certificate Authority that issued the certificate is not trusted by the management station, warning messages will be displayed on the management station. Having an iDRAC SSL/TLS certificate in place ensures a validated and secure connection.

Previously, creating and renewing iDRAC SSL/TLS certificates required a mostly manual, time-consuming effort. Monitoring approaching expiration dates and arranging for new certificates to be generated from a CA authority is just one aspect. IT admins then had to update scripts to deploy the certificates to embedded devices like the iDRAC.

iDRAC SCEP Client Support - Automatic Certificate Enrollment

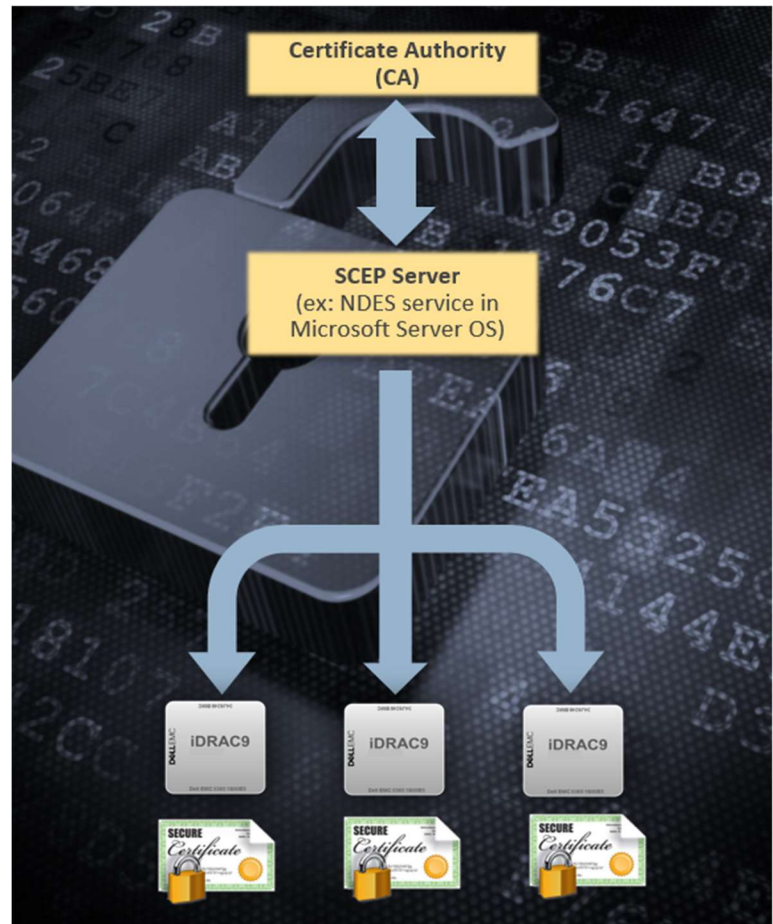
iDRAC has added a client for Simple Certificate Enrollment Protocol (SCEP) support. SCEP is a protocol standard used for managing certificates to large numbers of network devices using an automatic enrollment process. The iDRAC can now integrate with SCEP-compatible servers like Microsoft Server's NDES service to maintain SSL/TLS Certificates automatically. This feature can be used to enroll and refresh a soon-to-be-expired web server certificate.

Automatic Certificate Enrollment will enroll and monitor the iDRAC web server SSL/TLS certificate. It enrolls to the specified Certificate Authority (CA) credentials provided. This can be done 1x1 in the iDRAC GUI, set via Server Configuration Profile, or scripted via tools such as Racadm.

ACE- Automatic Certificate Enrollment

In Conclusion

Monitoring and assuring that all security measures are current and in place is both time-consuming and essential to prevent unauthorized access and manipulation of your servers. The Automatic Certificate Enrollment feature in iDRAC9 v4.0, is just another way Dell EMC is helping you to keep your data center secure.



iDRAC Integration with MS-NDES over SCEP



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