*This technical advisory describes an issue, which may or may not affect the customer's product.*

# Intel Technical Advisory

**TA-1176-01**

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## BMC SSL certificate and private key loaded on the system may be replaced when upgrading BMC firmware to version 2.86.2da97d3f

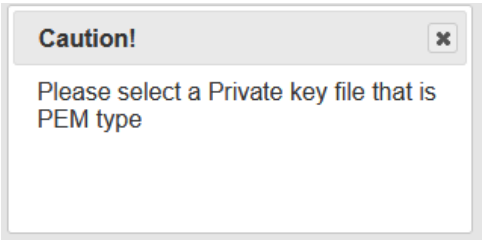
### Products Affected

| Product Name | Product Code |
|---|---|
| **Intel® Server Systems** | Intel® Server Systems R1000WFR Family<br>Intel® Server Systems R2000WFR Family<br>Intel® Server System S9200WK Family<br>Intel® Server System M20MYP Family |
| **Intel® Server Compute Modules** | Intel® Compute Module HNS2600BP Family |
| **Intel® Server Boards** | Intel® Server Board S2600BPR Family<br>Intel® Server Board S2600WFR Family<br>Intel® Server Board S2600STR Family |

### Description

When upgrading the system's baseboard management controller (BMC) firmware to version 2.86.2da97d3f, the BMC SSL certificate and the private key may be replaced by an Intel self-signed certificate if the previous loaded certificate uses a private key from a file with `.key` extension. In this case, the BMC reboot cycle takes longer and the event entry is logged into the system event log (SEL) as "Reserved SSL Certificates reset – Asserted".

Additionally, in the BMC version 2.86.2da97d3f, when trying to upload a private key file with the extension `.key` via **Integrated BMC EWS > New Private Key** option **> Choose File** button, a caution pop-up window is displayed with the message: "Please select a Private key file that is PEM type" (see the following figure).




### Root Cause

The BMC firmware version 2.86.2da97d3f is implementing validation of the file content and extension when loading the BMC SSL certificate and private key. This measure is taken to improve the system protection against malicious software and malware attacks. As a result, only `.pem` files are accepted to be loaded as private key.

After updating the system to the BMC firmware version 2.86.2da97d3f, the system reboots and checks for the format of the private key file. If the existing private key file has a `.key` extension, the certificate and private key are replaced with an Intel self-signed certificate to ensure that the Integrated BMC Embedded Web Server (EWS) can be accessed successfully. The event is logged in the SEL as "Reserved SSL Certificates reset – Asserted".

**Corrective Action / Resolution**

If the customer is using a private key with `.key` extension, the private key must be replaced with a `.pem` file before upgrading the BMC firmware to version 2.86.2da97d3f.

If the customer's certificate has been replaced by the Intel self-signed certificate in the Integrated BMC EWS, the customer can load a new BMC SSL certificate by using a private key with `.pem` extension.

Please note that there is no impact if the customer is using the Integrated BMC EWS' Intel self-signed certificate, or is using a chained-certificate private key with a `.pem` format.

Refer to the *Integrated Baseboard Management Controller Embedded Web Server User Guide* for Intel® server systems for instructions on how to upload a new SSL certificate and private key.

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