Application Note:	Downgrade from v8.5.0
Date:	28-April-2020
Version:	1.0.2

Downgrade from v8.5.0

After updating an AP-1800 to release v8.5.0, which contains FPGA component v6.62.6876, the device cannot be downgraded directly to any previous release.

If a direct downgrade is attempted, the FWUT will report FAILED after approximately 60% completed. After a failed update, the AP-1800 will have mixed firmware component versions. Once the AP-1800 is reset, the device will boot with LED blinking RED (3) times indicating a configuration failure. The AP-1800 can successfully be upgraded again to v8.5.0 in this state, but downgrade attempts will continue to fail.

To downgrade from v8.5.0 to a previous release, the FPGA component must first be downgraded as an intermediate step before the previous release is uploaded to the device. A separate .capfw file for only the FPGA component is provided as an intermediate step for downgrading.

1. Downgrade FPGA Component to v6.40

    a. Precondition:
        AP-1800 has been upgraded to v8.5.0 and contains the following versions:

IPedit:	[HP-8.5.0][AP-1.5.0][DECT-3.18.2437] Jan 22 2020
Dante Controller Product Version:	OMNEO6.50.6573 P6.62.6876
Dante Controller Dante Version:	4.2.0.3

    b. Use FWUT to upload the supplied file:
        "OAP-Firmware_FPGA_V_6_40_6217_signed.capfw".

    c. After approximately 2.5 minutes, the update will finish and the device will reboot.

    d. The AP-1800 will now report the following versions:

IPedit:	[HP-8.5.0][AP-1.5.0][DECT-3.18.2437] Jan 22 2020
Dante Controller Product Version:	OMNEO6.40.6217 P6.40.6217
Dante Controller Dante Version:	4.0.5.11

2. Downgrade OAP to Previous Release Using Complete Image

    a. Use FWUT to upload a previous complete OAP firmware release file.
        For example, v8.4.1 using file "OAP-Firmware_v8.4.1_signed.capfw".

    a. After the update is finished, the device will reboot and report all the correct component versions for the previous OAP release.