Customer Release Notes for DP-1005 CRN-0136

This document describes the following:

- ZAP-X® system software content that is new with the DP-1005 CRN-0136 release.

- Changes to ZAP-X® system software since the prior release (DP-1005 CRN-0131).

- Known issues and workarounds.

1. Compatibility

ZAP-X® software is a set of major software components. These release notes are for the following version:

- Treatment Planning Software: v1.8.55.

- Treatment Delivery Software: v1.8.52.

- Treatment Delivery Control Service Software: v1.8.52.

- System Database Software: v1.8.18.

2. Content of DP-1005 CRN-0136

The most recent release of ZAP-X® software is the DP-1005 CRN-0136 release. It contains the following:

2.1.   DP-1005 CRN-0136 changes

DP-1005 CRN-0136 contains fixes or enhancements for the following issues observed:

Title & Description	ID
Addresses corrupted DICOM files Performs a check on transfer syntax of the CT images prior to segmentation and corrects data export for compressed JPEG files.	13308
Address segmentation errors and artifacts Correct for errors when segmentation fails and no data is written. Removes artifacts around soft tissue and thinner structures like in nasal cavity and ears.	13310 13546

3. Known issues and workarounds

- **Image rendering not optimal (12334)**
  With the new release, CT images will have the headrest removed. However, the headrest will be displayed for CT series that had been imported prior to upgrade. The display may not be optimized for these images. This issue will go away as new CT series are imported.

- **Failed Self-Check (4613, 4989):**
  If self-check fails, follow the following steps:
  - Make sure there is nothing on the table.
  - Make sure the table cushion is correctly positioned.
  - Check for other obstacles in or around the system.
  - Power down the system and power it back up again.

  If there is still an issue after following these steps, call Zap service for additional support.

- **MV exit dose conflicts with prediction (5650)**
  Occasionally, the exit beam attenuation is not calculated accurately based on the CT information. This can result in an error when the MV imager provides data that conflicts with the calculated value. Referencing the MV dosimeter graph can confirm if the problem is from a few miscalculated beams or a broader problem with the dosimetry. To continue with treatment, turn off the dose check by right clicking on the overlay image in the delivery view and uncheck 'enable' in the context menu.

- **Patient extract from Operator Console inoperable after E-stop (7683):**
  Use the pendant to extract the patient, if patient extract from the Operator Console is inoperable after an E-stop was triggered.

- **Final beam may not be fully recorded when a treatment is aborted (8981)**
  When a treatment is aborted partially through a beam the final beam record may be off by several MU. Note the actual beam delivered and compare that to what is in the report. Adjust the make-up fraction as needed.

- **Dosimeter calibration factors in QA page not saved automatically (9657)**
  The dosimeter calibration factors in QA page need to be saved manually to take effect.

- **Cameras were not showing images (10155)**
  In rare cases the image panels on the right-hand monitor are blank after booting. Restart the Treatment View application to view the image panels.

- **MV Imager measurement timed out during treatment (10284)**
  Occasionally, the beam does not trigger the MV imager to start recording. This results in a time out error that can be cleared to continue treatment. Unless this happens repeatedly, there is no concern about the accuracy of the treatment.

- **Shell hesitates while opening/closing (12460)**
  When the operator presses the extract button in the Treatment View application, sporadically, the shell starts opening and then stops several times. The solution is to restart the Pendant application.

- **Five second image interval is disabled in Treatment View (12556)**
  The button the change the time interval between x-ray images to 5 seconds is temporarily disabled. This will be addressed in a future release.

- **TDCS doesn't always restart after terminating Treatment View mid-treatment and then restarting (12559, 12591)**
  When the Treatment View application is restarted after losing response or being accidentally closed, in rare cases, the Treatment Delivery Control Service is not started automatically. The workaround in the error state is to exit the Treatment View application and restart it.

- **Therapist user has insufficient permissions for recording treatment (12604)**
  The default permissions for the therapist user group have been found to be insufficient for recording treatment reports. To avoid this issue, use the admin user group.