



# Automation of Software Release Installation on target product

## About Celestia Antwerp

Celestia Antwerp is a leading company in Belgium, active in the field of satellite ground communication technology. It is part of the Celestia Technologies Group.

Celestia Antwerp's core business is in the delivery of satellite communication solutions for the ground segment extension with products and systems. Celestia Antwerp operates both on the commercial and institutional markets, supporting space agency programs, as well as industrial company projects worldwide. The company activities have been located in Antwerp since 1962, when it was founded as part of Bell Telephone.

## Type and Description:

Type: Internship

Description: Celestia Antwerp products are today relying on PXE NetBoot / BIOS environment for software installation automation from a release storage server. Indeed, it allows to fetch an image from the network. However, this environment gets outdated and becomes unsupported by modern PC which makes this framework obsolete. The aged BIOS system has been advantageously replaced by UEFI natively offering build-in network functionalities and integrated management of multiple operating system installations. UEFI boot becomes now the standard scheme for software installation over a network. The first objective of this internship consists in setting-up a reliable & robust UEFI remote software installation environment. The second objective relates to the automation aspect for which Red Hat Ansible Automation Platform has been pre-selected as a valuable option. The candidate will investigate further the automation aspects, eventually propose alternative solutions to Ansible, realize and demonstrate a proof of concept.

## Objective and Deliverables:

Objective: The objective of this internship is two-fold; on one hand, the migration from PXE NetBoot/BIOS to UEFI network installation scheme and on the other hand, the realization of a proof of concept automation software installation framework. He/She shall finish this activity with a presentation to a mixed audience of academical and industrial experts.

Expected deliverables:

The following deliverables are expected:

- Documentation : Architecture, User Manual, Final Report, Final Presentation.
- Scripts (duly commented).

**Duration:**

Negotiable.

**Evaluation Criteria:**

Evaluation Criteria

The following will be taken into account for the final evaluation.

- Demonstrated technical skills.
- Timeline of deliverables vs agreed plan.
- Quality of deliverable.
- Level of autonomy shown by the candidate.
- Motivation and initiatives taken.

**Location**

Roderveldlaan 1 (bus 3) – 2600 Berchem - Belgium

**More Information about Celestia and other potential internship or open vacancies:**

<https://www.celestia-antwerp.be/>

**Contact Information**

Would you be interested in this internship or would you like to get more information about this internship, please take contact with [hr@celestia-antwerp.be](mailto:hr@celestia-antwerp.be).