

SA5 Rel-19 23Q3 moderated discussion – Management aspects of RedCap feature - Version 0.0.3
SA5

<https://nwm-trial.etsi.org/#/documents/8709>

Study on Management aspects of RedCap feature

Justification

RedCap is a lightweight network access solution aiming at scenarios with low-cost, low-power, and low-speed requirements, mainly applying to industrial sensors, video surveillance, and wearable scenarios.

During Rel-17 and Rel-18, abundant SIs and WIs related to RedCap have been started widely by several TSGs including RAN1, RAN4, SA2, CT1, CT3, CT4, and CT6 with plenty of technical reports and normative works completed. RAN1 focuses on the physical implementations of RedCap and finishes TR 38.875 and TR 38.865. Following normative works have been finished in TS 38.211 and TS 38.300. SA2 focuses on the architecture of RedCap-related functionalities and finishes TR 21.700. Following normative works have been finished in TS 23.501 and TS 23.502.

Therefore, considering previous outputs being competed by other TSGs, functionalities related to RedCap feature have been identified. SA5 is supposed to start the study the potential effects for OAM and possible management requirements of normative scenarios to promote RedCap supporting vertical.

Objectives

- (1) Study the enhancement of management mechanism supporting RedCap capabilities, e.g., BWP-related enhancements and eDRX-related enhancements.
- (2) Study the dedicated performance management for RedCap, e.g., throughput-related management and RRC-inactive-status-related management.
- (3) Study the performance measurement and energy efficiency for RedCap services
- (4) Study potential scenarios supporting RedCap-related management data interacting between CSC and CSP.

Potential collaboration groups and related topics: SA2, RAN1

Feedback Form 1: Comments for objectives

1 – AsiaInfo Technologies Inc

Feedback to comments we got in v0.0.1:

To: Ericsson LM, Robert Petersen, and Huawei Tech.(UK) Co.. Ltd, Kai Zhang:

We have organized with Justifacation and Objective now. Please drop your further suggestions. Thanks a lot.

To: Samsung R&D Institute UK, Deepanshu Gautam

We have updated item 3 in this version. Please check if this description meets you well. Thank you very much.

2 – Ericsson LM

Version 2 is so much better than version 1. Now I can have technical questions.

Where are the management restrictions for bandwidth that need to be studied?

Does not the second objective overlap with the EE topic 5GEE?

Where in the management system are the restrictions for handling of different kinds of UEs that is to be studied?

Does not the support for verticals overlap with the exposure topic MExpo?

3 – AsiaInfo Technologies Inc

Access bandwidth of RedCap UEs is different from conventional UEs, so management mechanism when bandwidth reducing is supposed to be studied. Related requirements refer to work item in RAN1. Different types of RedCap UEs require different capabilities and features. Accordingly, corresponding KPIs, feature management and performance measurements are supposed to be studied.

EE-related management objective would be discussed with the EE moderator. Objective (4) has been updated focusing on potential scenarios supporting RedCap-related management data interacting between CSC and CSP.

4 – AsiaInfo Technologies Inc

For Samsung:

This study focuses on management enhancement supporting RedCap other than management of UEs and Objectives have been updated to avoid misunderstanding.

5 – AsiaInfo Technologies Inc

To all:

6 – AsiaInfo Technologies Inc

According to feedback suggestions, we decide to update objectives as following, and also make a v0.0.3 with this update:

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(1) Study the enhancement of management mechanism supporting RedCap capabilities, e.g., BWP-related enhancements and eDRX-related enhancements.

(2) Study the dedicated performance management for RedCap, e.g., throughput-related management and RRC-inactive-status-related management.

(3) Study the performance measurement and energy efficiency for RedCap services

(4) Study potential scenarios supporting RedCap-related management data interacting between CSC and CSP.

Feedback Form 2: Suggestions for other potential scopes

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