



Echo Cloud – Technical Overview

Advanced mobile network measurement solution

Enhancell Echo mobile network measuring tools run directly on your handset. They are designed for PC-less drive and walk surveys.

With Echo you do not need custom test devices and firmware. This means that you can be assured to see the network exactly as your customers see it.

Having Echo run on commercial phones not only saves you from spending on expensive custom hardware but also allows you to easily transfer licenses from one phone to another.

Automatic software updates guarantee that you are always running the latest software.



Echo Cloud

Echo Cloud is an online service included in all Echo products. In addition to providing storage and automatic syncing of device settings and log files, Cloud gives you unparalleled control of your Echo devices from a remote location similarly to Echo Plus and Echo Studio.

Cloud provides the user an easy-to-use UI for creating and managing device configurations, tests, results, and maps, which can all be synchronized with Echo devices.

Echo Advantages

- Fully automated update via Cloud ensures that your software is always up to date.
- Unique subscription-based pricing allows you to only pay for the licenses you need when you need them.
- Remote configuration via Cloud allows easy control of your Echo fleet.
- Log file storage and export in Cloud allows you to make the most out of your data.

Full 5G support

Echo supports measurement for a wide range of 5G parameters ensuring the full advantages of 5G measurement for the users. 4G licenses are upgradeable to 5G making it convenient and cost-effective for existing customers.



Key Features

- Capability to control Echo devices and scanners remotely
- Two-factor authentication for extra security
- License management: transfer licenses between devices, pull them from devices, and see who is using licenses
- User management: control user information, permissions, and notifications
- Configure Echo devices remotely: all measurement and test settings can be pushed from Cloud to Echo devices
- Manual and Scripted tests can be created and modified with built-in script editor in Cloud. When tests are edited in Cloud, they are automatically synchronized with Echo devices
- Send messages to and receive them from Echo devices
- Automatic log file storing after recording
- Access measurements easily
- Download your measurements in a multitude of formats (Echo, Nemo, CSV, Qualcomm, ESRI Shape, Google Earth KLM, PCAP, ZK-SAM, GNS)
- Base station locations automatically loaded from Cloud
- Planned drive routes can be pushed from Cloud to Echo devices
- Customized measurement views can be published to Cloud from Echo devices, and shared with and utilized by other users
- Support for indoor and outdoor mapping. Including offline mode map data caching for outdoor maps
- Indoor map synchronization
- Indoor floor plans with markers and geodetic coordinates (support e.g. for iBwave format). Enables geocoding indoor floor plans on top of Google Maps
- Indoor map import from any image file format (.jpg, .png, .bmp, etc.)
- Full support for 5G scanner measurements using PCTel scanners. Support for PCTel IBflex®, PCTel HBflex®, DRT 4311B and EPIQ scanners, and RF Explorer. Scanners can be connected via Bluetooth
- Option to have a dedicated private Cloud server in customer's desired geolocation*

* For more details on the private Cloud server pricing, please contact Enhancell sales.

Data post-processing

Measurement data can be exported directly from Echo devices to Cloud when they are connected. The data can be exported further from Cloud to Echo Studio or any other compliant 3rd party data post-processing software.



Echo Cloud versions

Cloud S	Free of charge with all Enhancell Echo tools, 1 GB of storage, no backup service, no de-centralization of data. Recommended client count** is up to two (2).
Cloud M	100 GB of storage, no backup service, no de-centralization of data. Recommended client count** is up to 40.
Cloud L	500 GB of storage, automatic backup of all data, no de-centralization of data. Recommended client count** is up to 200.
Cloud XL	1 TB of storage, automatic backup of all data, no de-centralization of data. Recommended client count** is up to 400.
Cloud XXL	2 TB of storage, automatic backup of all data, data stored in two separate physical locations. Recommended client** count is 400+.
Cloud Dedicated L	500 GB of storage, automatic backup of all data, data stored in two separate physical locations. Recommended client count** is up to 200.
Cloud Dedicated XXL	5TB of storage, automatic backup of all data, data stored in two separate physical locations. Recommended client count** is 400+.
Private Cloud XXL	Storage, backup, and data de-centralization to be determined. Recommended client count** is 400+.

** The client count is based on the average log file size when measuring 8 hours per working day



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