turnium

Turnium Field Trial

Hands-on experience with Turnium

A Field Trial with Turnium enables you to get hands-on with the Turnium platform and see it perform live. During a Field Trial, you get access to a cloud-based Management Server and Aggregator which you can connect to via a CPE in your lab or office.

The Field Trial gives you the ability to deploy a CPE and gain valuable hands-on experience with Turnium link aggregation (bonding), failover, tunnel bypass, encryption, quality of service, bandwidth adaptation and other features. You'll also become familiar with the user interface, performance charts, quality of service, and business continuity.

A Field Trial is quick to deploy and can be turned up within hours of concluding a basic letter of agreement with Turnium. It's worth noting that procuring a CPE may take longer than provisioning it and the Field Trial environment.

For more information on a Turnium Field Trial, please consult the FAQ next page.

Field Trial FAQ

1. What capabilities will be exposed during a Field Trial?

- You will have access to the Turnium Management Server, which is the command/control interface for the Turnium platform. During the Field Trial, you will receive instruction and training on how to use the Management Server GUI to complete tasks. One of the first tasks will be to provision the CPE that is used during the Field Trial.

- Other tasks and objectives can be agreed to prior to the Field Trial starting. This gives everyone a sense of what "good" looks like with respect to completing the Field Trial.

2. How long is a typical Field Trial?

- Field Trials can be as short as a couple of days or extend to 10 business days. The duration of the Field Trial may vary, depending on the goals, objectives, and the time required to order and receive CPE.

3. How long does it take to set up a Field Trial?

- We can set up the infrastructure for your Field Trial within hours of finalizing a basic letter of agreement with your Turnium account executive. Note that it may take longer to purchase a CPE and get it shipped to your office than to set up the Field Trial!

4. What kind of performance should I expect in a Field Trial?

- A Field Trial doesn't test speed. It is about testing basic functionality and ensuring that you're happy with what can be done. Performance testing isn't possible because there are bandwidth limitations in the cloud-based core nodes (Aggregators) provided for a Field Trial. Conducting performance tests requires you to deploy core node hardware or virtualizations running our software in your network and data center infrastructure and build an environment that supports your performance requirements. This is beyond the scope of a Field Trial.

5. How do I get the necessary CPE hardware?

- We suggest that you purchase your own CPE for the Field Trial. This helps you understand the supply chain for CPE in your region.
- Our recommended minimum CPE specification is an x86-based network device configured as follows:
  - Intel Atom C3558 or better
  - 4Gb RAM or better
  - 8Gb SSD Storage or better
    - Note that larger sizes of RAM and storage may be more economical so go with sizes that are readily available at reasonable prices.
  - 4 Network port (minimum)
  - Please note that the type of processing done in an SD-WAN application relies more on processor speed / clock speed than on the number of cores in a processor. More cores are not better. In fact, our application performs very well on a CPU with 2 or more cores and the highest clock rates available.
- If needed, Turnium can be flexible on the start date of the Field Trial to accommodate for the lead times to obtain a CPE so that any delays do not affect your available testing time. If you need assistance with a start date or with finding appropriate CPE, please contact your Turnium account executive for options.

6. Can I use a virtualized CPE for a Field Trial?

- No. During a Field Trial virtualized CPE are more complex to deploy than a physical CPE. This defeats the purpose of the Field Trial.
- Installing and configuring a vCPE requires a detailed understanding of the Turnium product that Field Trial participants usually lack. From our perspective, having tried this in the past, it is just not a good experience. Plus, you'll probably be selling customers physical devices anyway, so let's test what you're most likely to sell, deploy, and support.
- In production environments, with a clear understanding of the Turnium product, vCPE work successfully at customer sites or cloud facilities.

7. Is there a cost for a Field Trial?

- A Field Trial is free-of-charge for prospective partners that are qualified. Being qualified means that you've reviewed Turnium's technical information, determined that our platform supports your technical and business use-cases, come to agreement on commercial terms, and are ready to sign an agreement with Turnium. The Field Trial gives you confidence to proceed based on hands-on verification and experience.
- Prospective partners that have not reached this stage in their evaluation but wish to implement a Field Trial nonetheless may be charged a nominal fee.

8. Can I conduct any other testing other than a Field Trial?

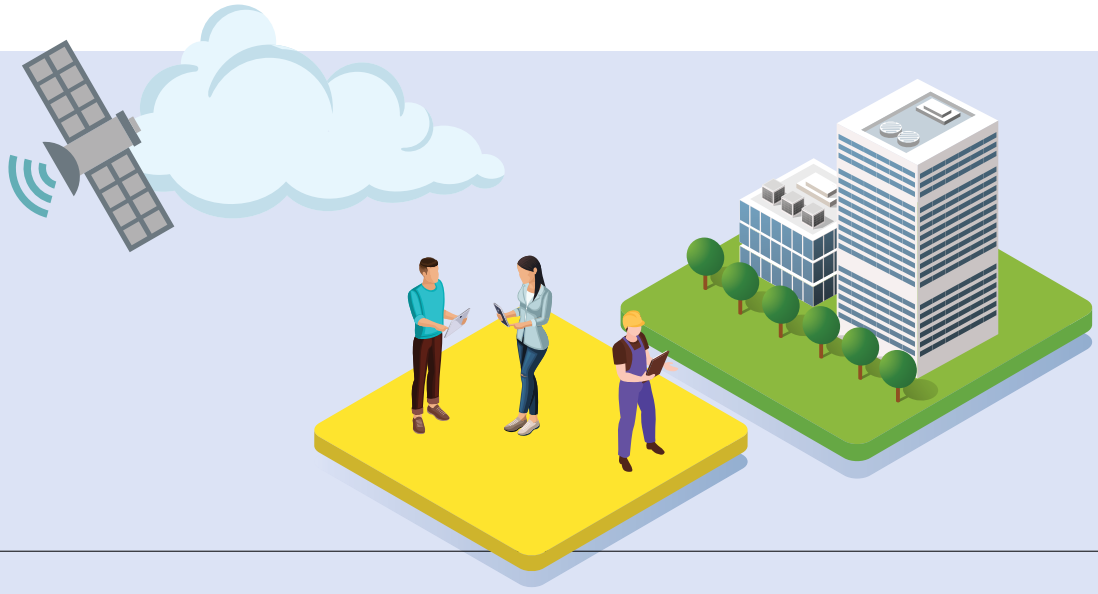
- Yes. Turnium offers a Proof of Concept (POC) for prospective wholesale, or white-label/ OEM partners. A POC is a more complex deployment that requires you to deploy multiple Aggregators in your data center infrastructure and configure your routing and security to enable communications with the internet. In a POC, you can test more complex scenarios including Aggregator failover.
- A POC takes longer to set up and configure as partners typically need to purchase additional servers, install them, and configure their network environments. A POC also involves more extensive test use-cases, documentation, and training. By the time a POC finishes, your technical team have acquired significant information and experience with the Turnium product.
- Due to the time and effort required from Turnium, we charge for a POC, the cost of which is credited to your initial, one-time startup fee.

9. Can I test LTE or wireless failover?

- The Field Trial can test an external LTE modem, but not the use of embedded LTE cards in a CPE.
- We very strongly recommend that you use an external LTE modem instead of an embedded modem in almost all circumstances. An external modem allows the antenna to be placed to optimize performance and throughput, sidestep a LOT of challenges, and simplify deployments considerably.
- Embedded LTE cards often require certification by national/regional carriers. Support varies by carrier and country. In addition, the make and model of LTE cards that are supported by Debian Modem Manager is relatively limited. As a Debian-based application, our platform uses Debian Modem Manager to communicate with the LTE card. A list of LTE cards that have been tested or have not been tested but may work can be found HERE. Obviously, as with anything that's "not been tested but may work," an LTE card on this list may not work – and can consume a LOT of time trying to force it. We also support openSUSE, which has modem manager support for many newer LTE modems, most certainly more than Debian Modem Manager. However, please note that during a Field Trial, we will do not provide support for any embedded LTE modems.

10. Can I test Low Earth Orbit Satellite connectivity from Starlink?

- Yes, this works. You'll have to provide the terminals and connectivity.



11. Where can the Turnium cloud-based Management Server and Aggregator be hosted?

- We use a 3rd party cloud provider to host Field Trial instances. They can be hosted in any of the locations below.

Americas

- Atlanta
- Chicago
- Dallas
- Honolulu
- Los Angeles
- Mexico City
- Miami
- New Jersey
- Seattle
- São Paulo
- Silicon Valley
- Toronto

EMEA

- Amsterdam
- Frankfurt
- London
- Madrid
- Paris
- Stockholm
- Warsaw
- Johannesburg

APAC

- Bangalore
- Delhi National Capital Region (NCR)
- Mumbai
- Melbourne
- Seoul
- Singapore
- Sydney
- Tokyo

About Turnium

Turnium Technology Group, Inc. delivers its software-defined wide area networking (SD-WAN) solution as a white label, containerized, disaggregated software platform that channel partners host, manage, brand, and price or as a managed cloud-native service provided by Turnium. Turnium offers a channel partner program designed for Telecommunications Service Providers, Internet and Managed Service Providers, System Integrators, and Value-Added Resellers.

About SD-WAN

SD-WAN is revolutionizing the networking and telecommunications industry by abstracting secure, high-speed networking and network control from underlying physical circuits. SD-WAN frees enterprises, small-medium businesses, cloud, and managed services providers from the business and cost constraints imposed by traditional telecommunications companies.

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