

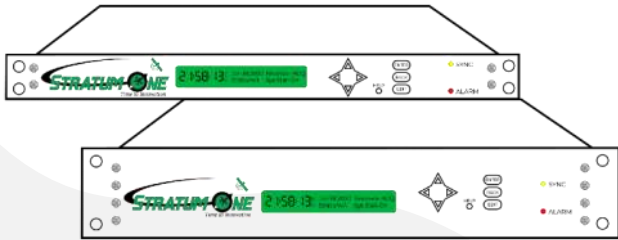


Secure Time Solution and Services for Critical Infrastructure





STRATUM1 TIME



**PRECISE TIMEBASE
& FREQUENCY**



**CESIUM CLOCKS
& OSCILLATORS**

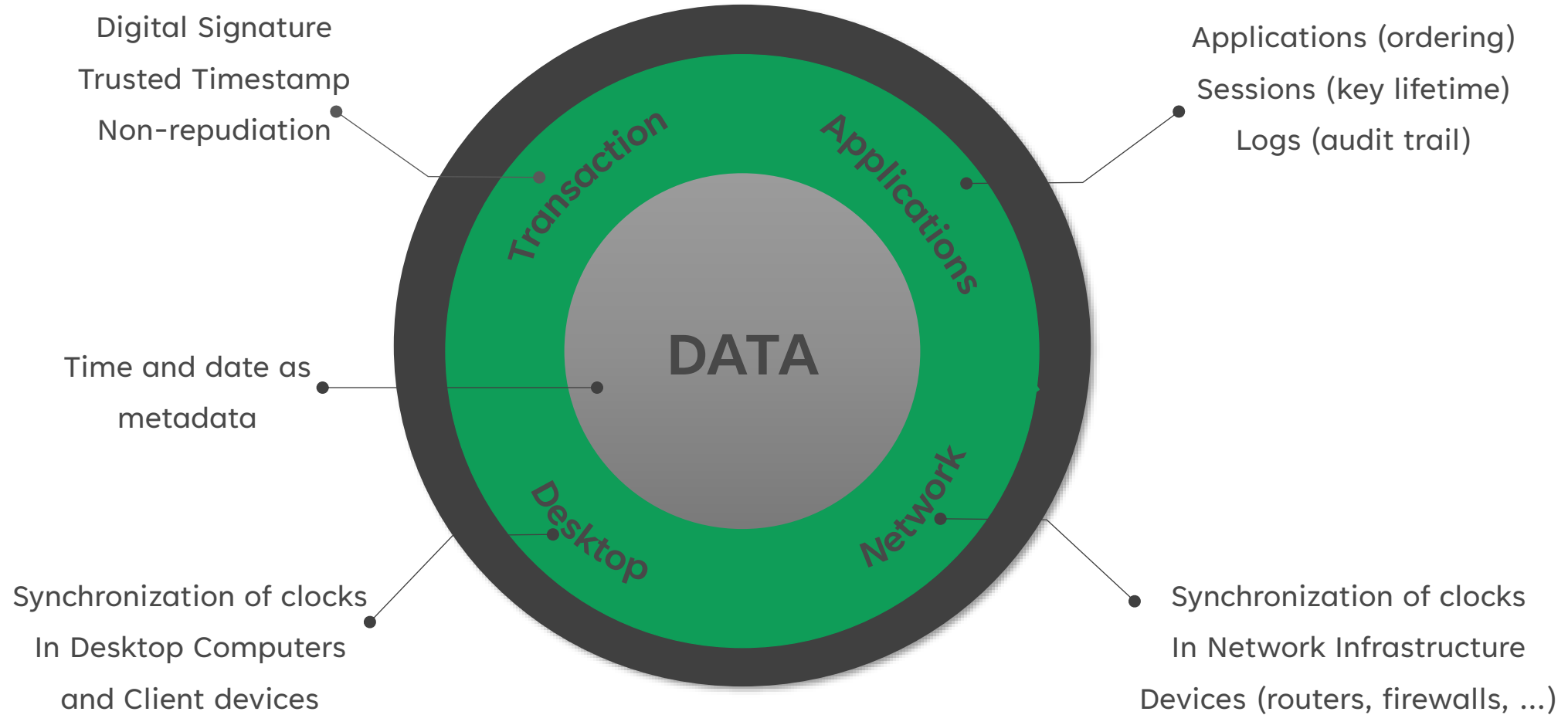


**ANTI-JAMMING
ANTENNA**



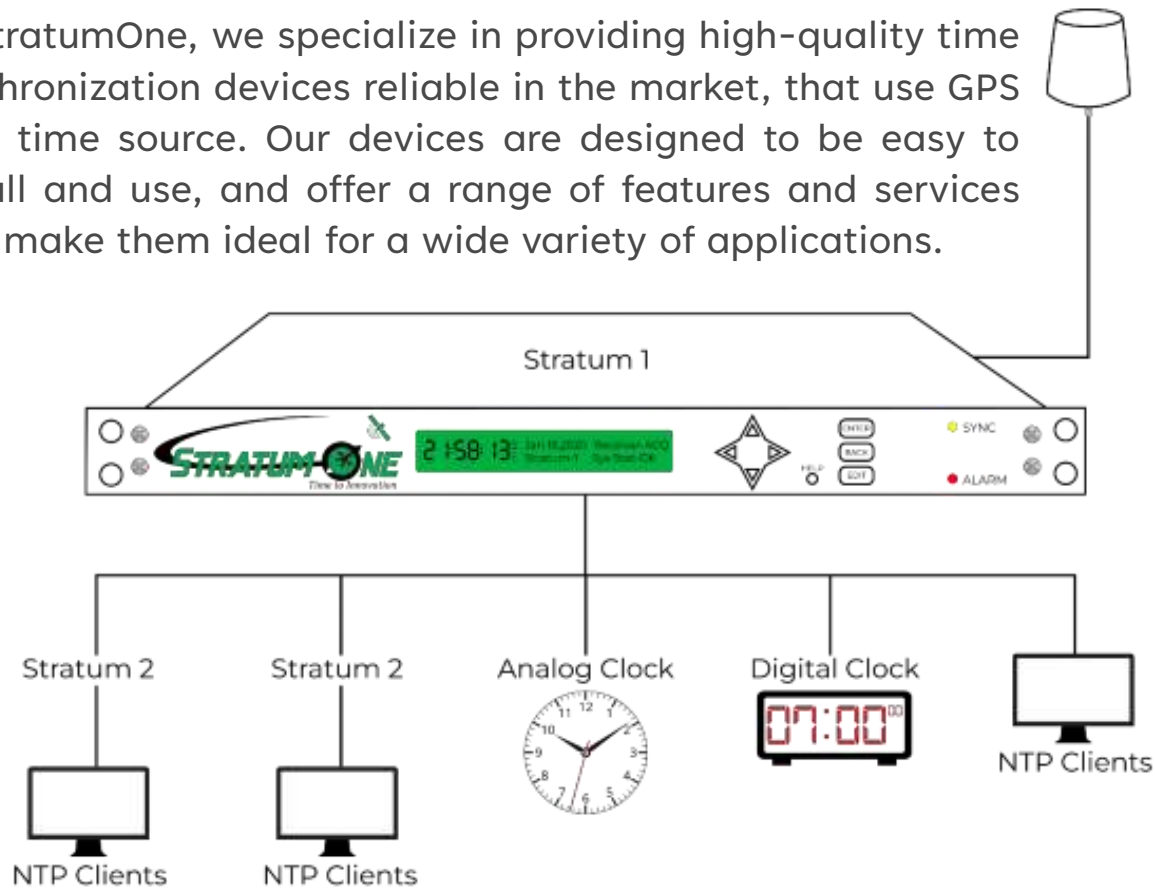
**STRATUMONE 24/7
LOCAL SUPPORT**

TIME IN IT LAYERS

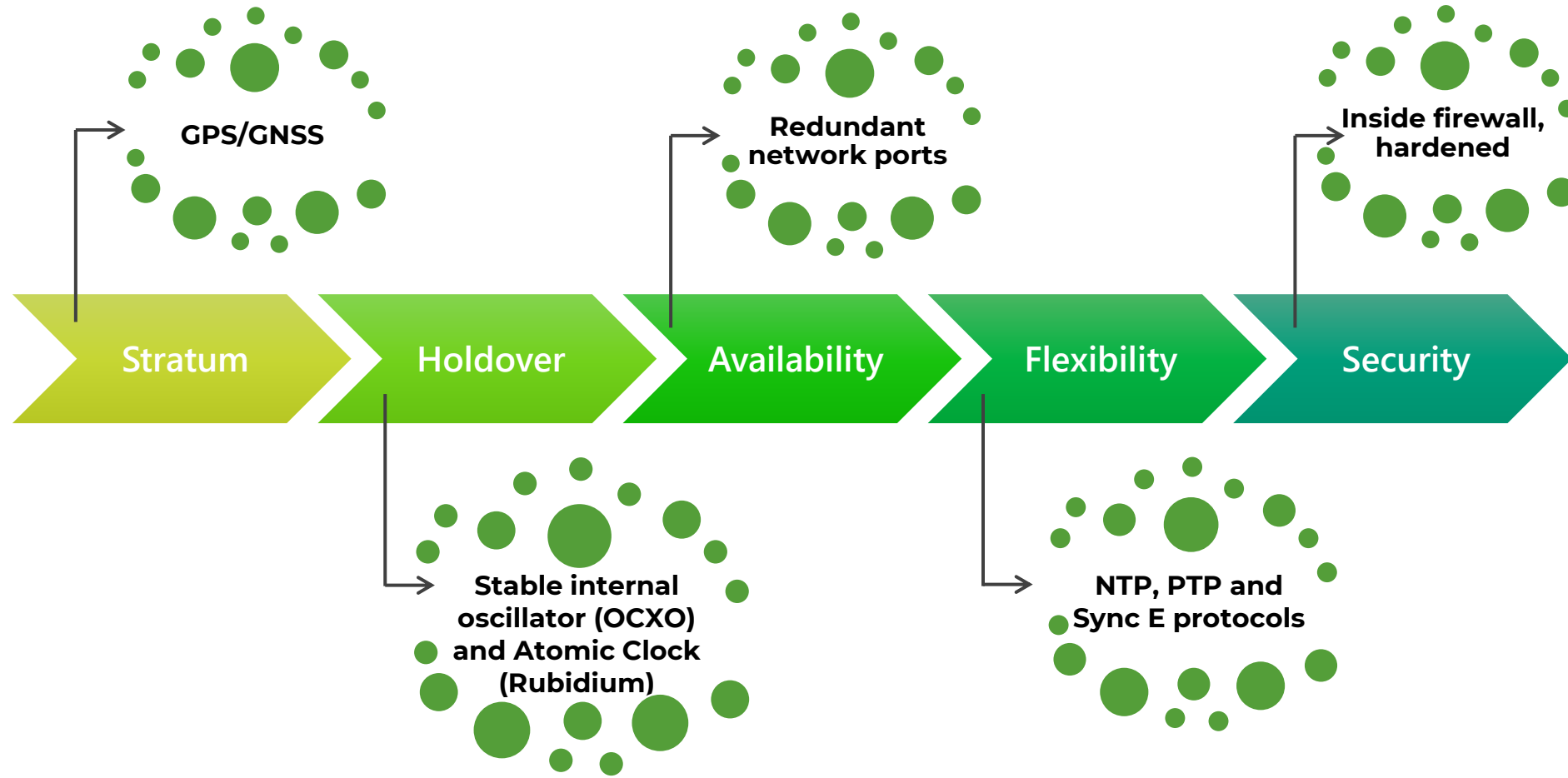


STRATUM1 TIME SOLUTIONS

At StratumOne, we specialize in providing high-quality time synchronization devices reliable in the market, that use GPS as a time source. Our devices are designed to be easy to install and use, and offer a range of features and services that make them ideal for a wide variety of applications.



CUSTOM SOLUTION



WHY HOST OWN NTP?



TIME ACCURACY

- To reduce confusion in shared file systems, it is crucial for the modification times to be consistent, regardless of what machine the file systems are on
- Billing services and similar applications must know the time accurately
- Sorting email and other network communications can be difficult if timestamps are incorrect
- Financial services require highly accurate timekeeping by law



IMPROVE SECURITY

- Tracking security breaches, network usage, or problems affecting a large number of components can be nearly impossible if timestamps in logs are inaccurate
- Time is often the critical factor that allows an event on one network node to be mapped to a corresponding event on another
- Cryptographic key management and secure document transmission may require using accurate encoded timestamps, which match unencoded timestamps to help assure document authenticity

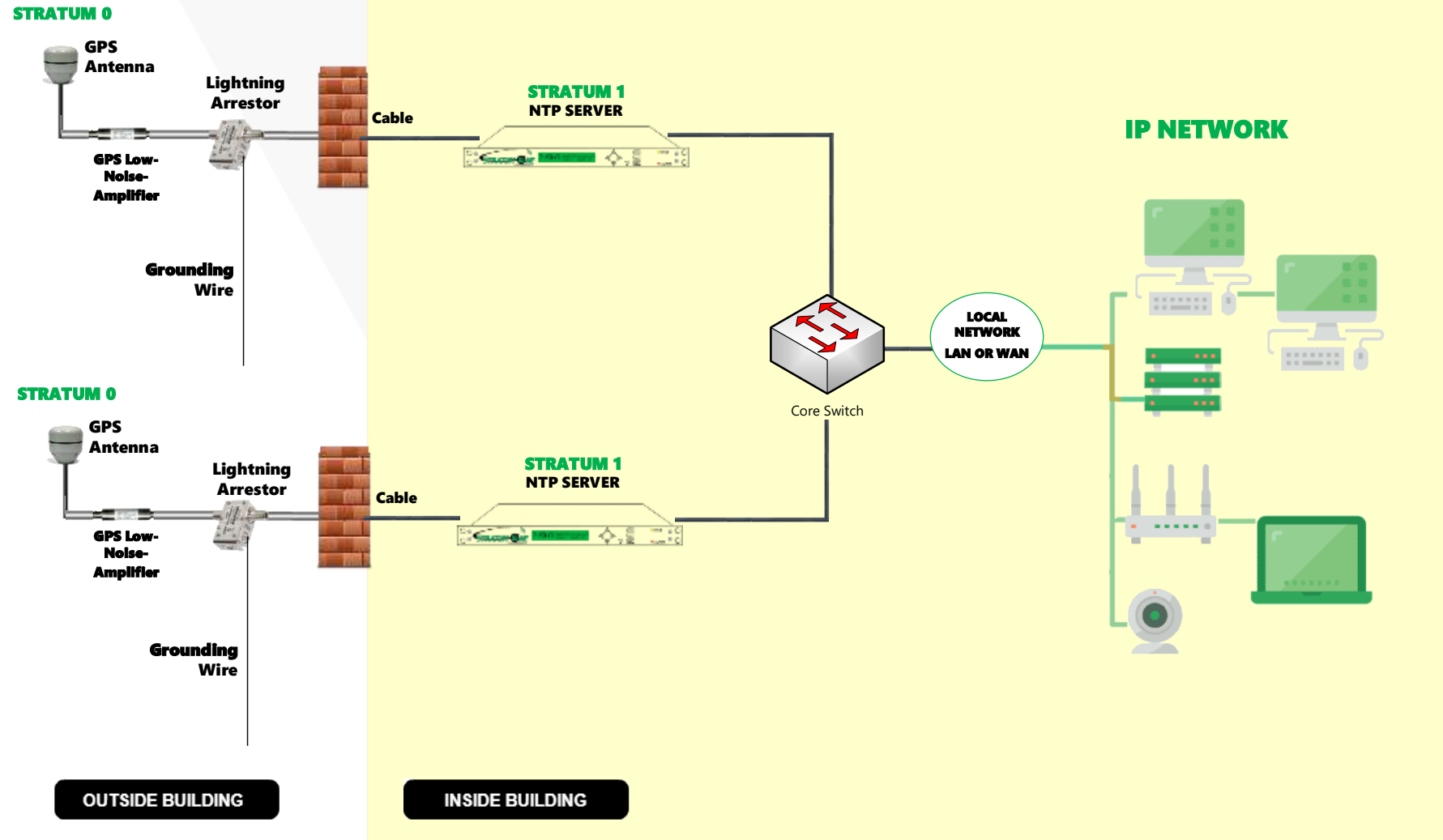


SECURED/ STRATUM TIME

- RPC needs clocks to be **sync'd to within 15 seconds for proper operation**
- Many authentication systems, Kerberos being the most prominent example, use dated tickets to control access to systems and resources
- Investigating incidents that involve multiple computers is much easier **when the timestamps on files and in logs are all in sync.**

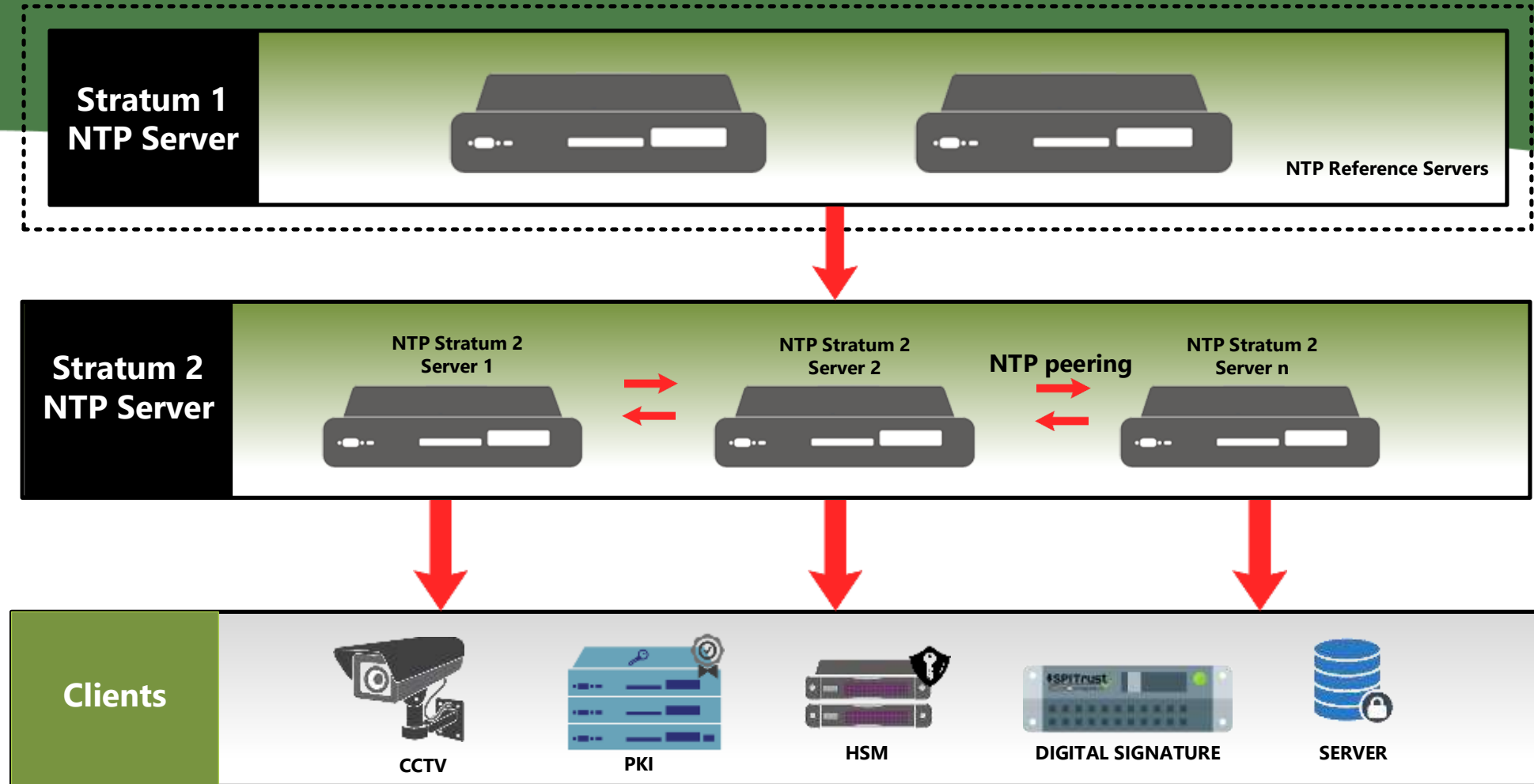


HIGH-LEVEL SOLUTION DESIGN



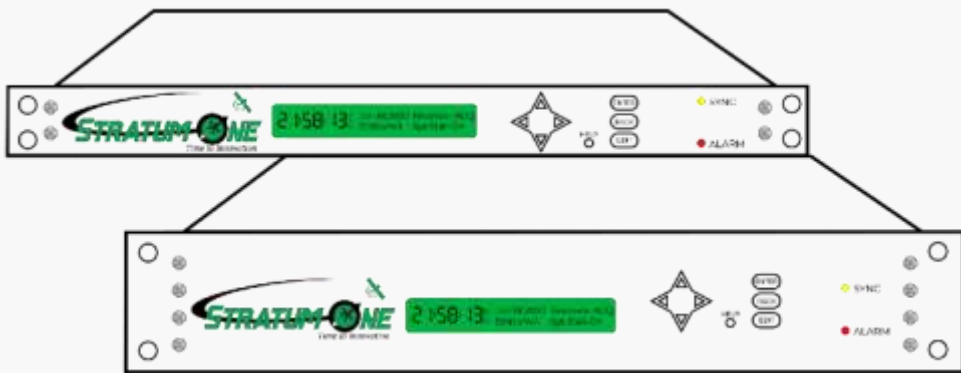
NTP STRATA

Stratum 0  GNSS



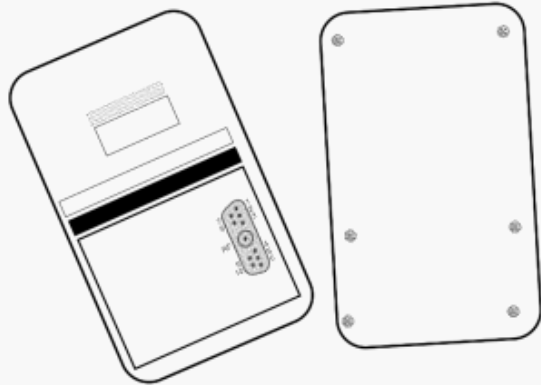
PRECISE TIMEBASE & FREQUENCY

StratumOne - **Precise TimeBase and Frequency** services are dedicated time synchronization solutions that provide highly accurate and stable time and frequency signals to critical applications such as **telecommunications, power grid management, and military systems.**



CESIUM CLOCKS & OSCILLATORS

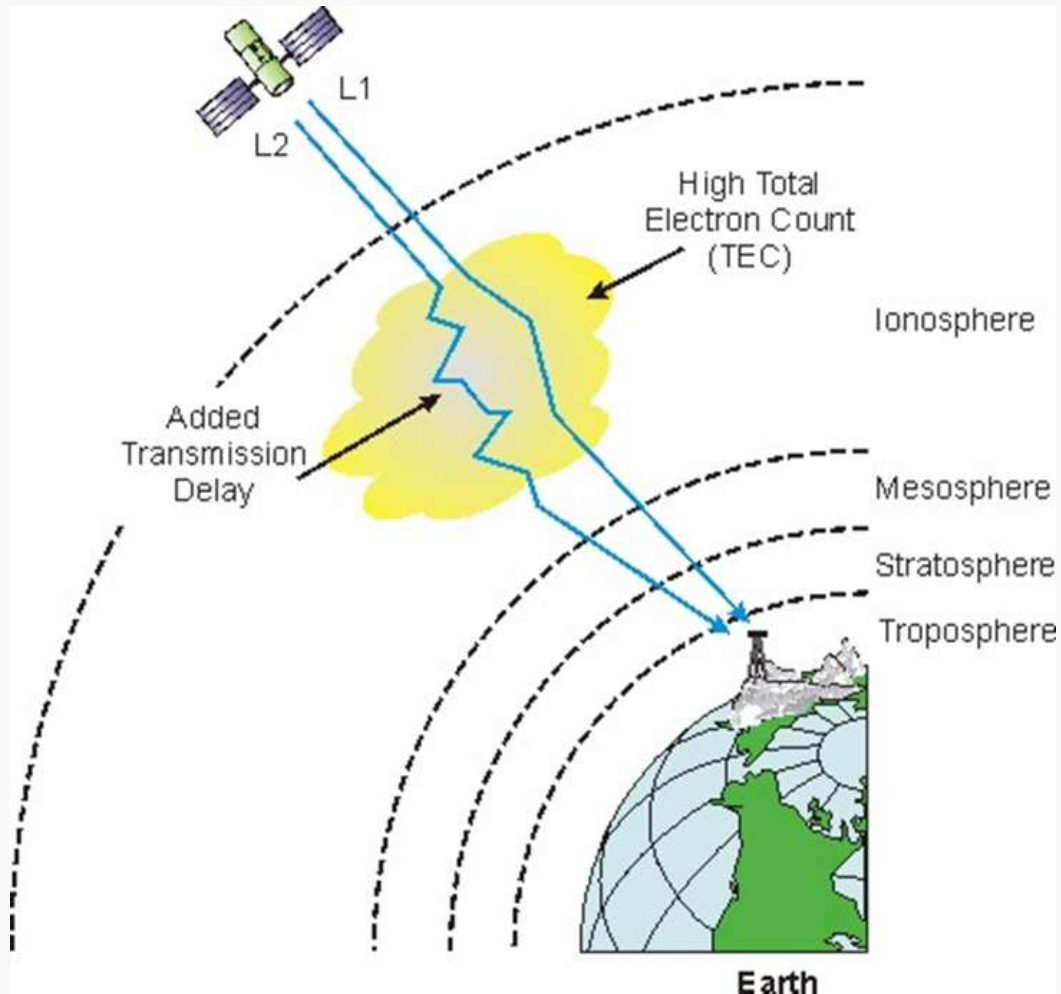
Holdover function by either **CSAC (Cesium)**, **Rubidium** or **OCXO** for stable time delivery at all times.



In critical applications where continuous and precise timekeeping is crucial, redundant systems and multiple timing sources may be used. This ensures that even in the event of a primary reference failure, the holdover function combined with redundant sources can maintain stable time delivery at all times.



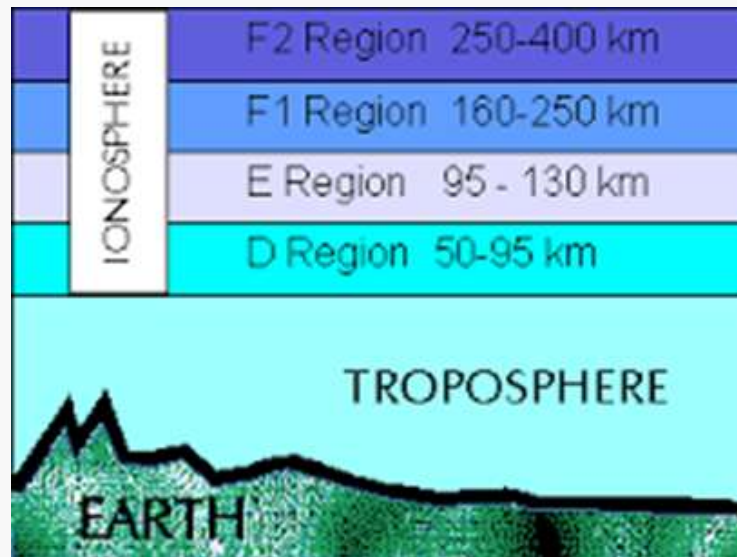
GPS: IONOSPHERIC DELAY ERROR



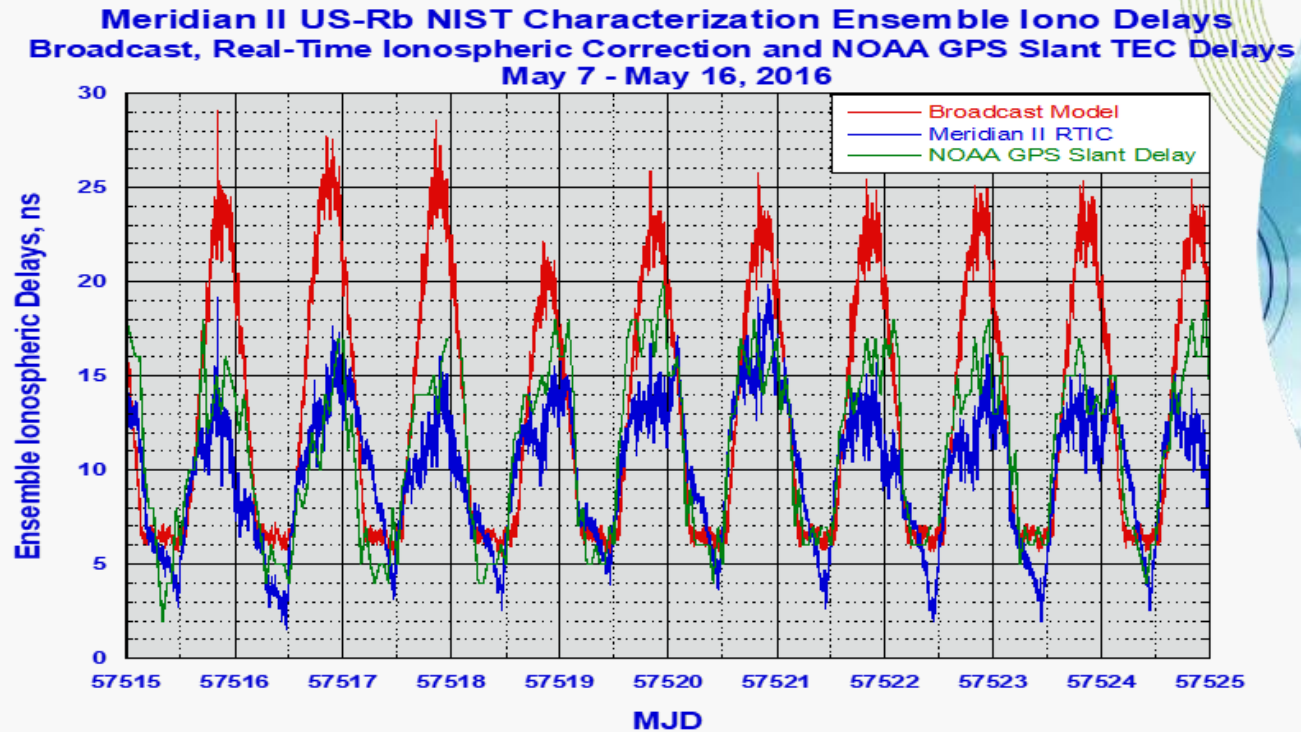
Ionospheric delays are the largest contributor to GPS time-transfer error.

REAL-TIME IONOSPHERIC CORRECTIONS

- Measures and removes ionospheric delay in real-time with GPS L1 receiver.
- Time transfer performance of L1/L2 receivers at much lower cost.
- Significantly improves upon the broadcast Klobuchar model.



REAL-TIME IONOSPHERIC CORRECTIONS



Meridian II with Real-Time Ionospheric Corrections provides the stability of a standard cesium reference at all observation intervals.



GPS ANTI-JAMMING ANTENNA

A GPS **anti-jamming antenna** is a specialized type of GPS (Global Positioning System) antenna designed to mitigate or counter the effects of jamming and interference. Jamming refers to intentional or unintentional radio frequency (RF) interference that disrupts the GPS signal reception, causing inaccuracies in the GPS device's positioning and timing information.



STRATUMONE 24/7 LOCAL SUPPORT



**Guaranteed Local Support Response
within 4 hours available**

**Guaranteed Local Support Response
within 4 hours available**

Response Plan Support

- Telephone
- Email

Upgrades

- Firmware updates
- Security Advisory

AVAILABLE

9am to 5pm, excluding weekends and
Holidays

Local RMA

- Fast Device Replacement

Response Plan Support

- Telephone
- Email
- Remote

Upgrades

- Firmware updates
- Security Advisory

AVAILABLE

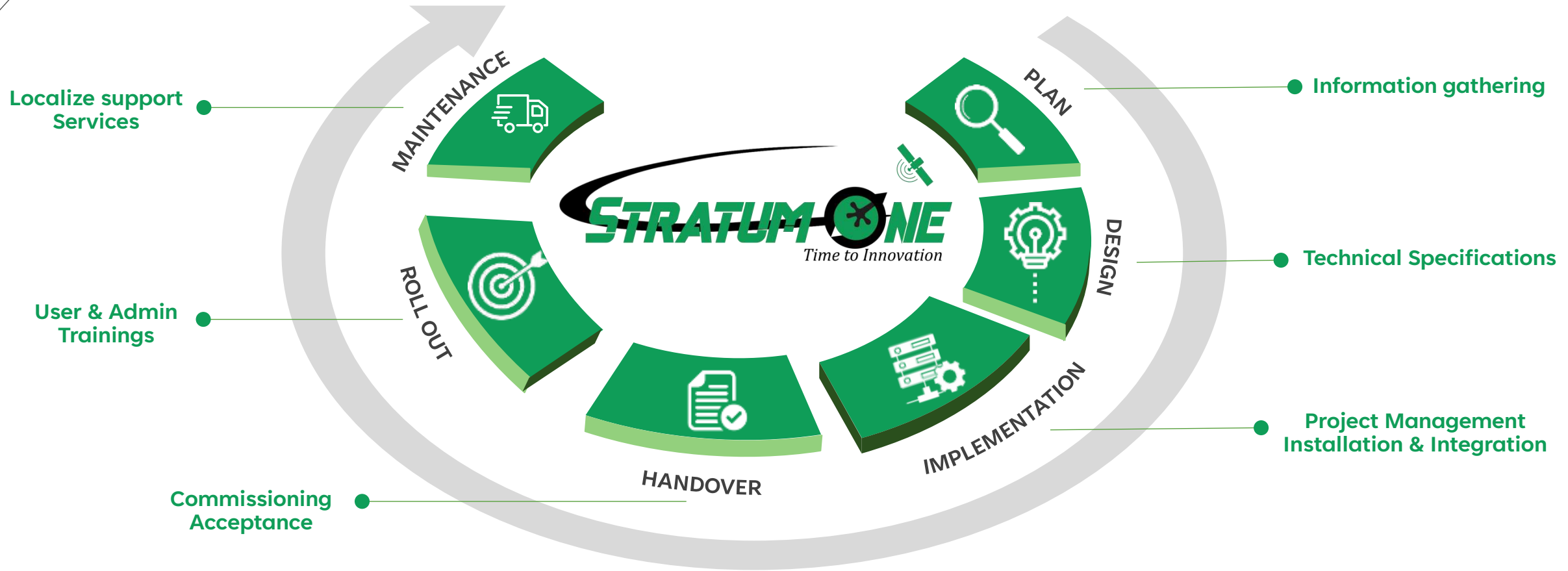
24/7 Offsite & Onsite (If required)

Local RMA

- Fast Device Replacement

We are committed to provide the highest levels of accuracy, stability, and reliability, supported by our Service Level Agreement (SLA) support. Our SLA guarantees that our NTP solutions maintain consistent and reliable performance, ensuring minimal downtime to keep your operations running smoothly.

360° PROFESSIONAL SERVICES



OUR LOCAL & REGIONAL REFERENCES

GOVERNMENT & PUBLIC	             
FINANCIAL	             
TRANSPORTATION & HEALTHCARE	        
TELECOM / IT	        
ENERGY	    

COMPANY OVERVIEW

The leading Software and Service Provider in EMEA with:

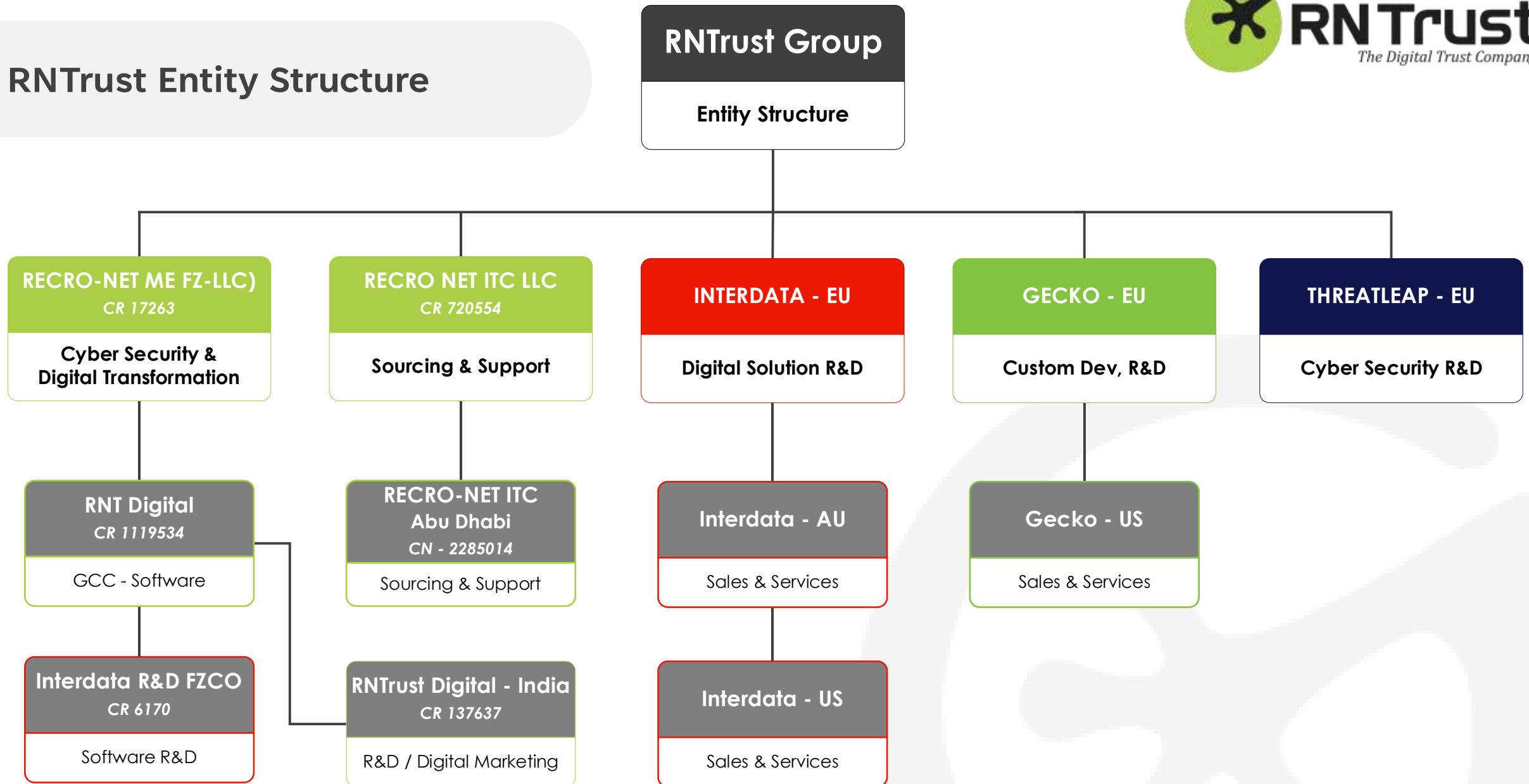
- More than **20 years** of Excellence in Services and Solutions Delivery
- Global Offices : **Abu Dhabi, Bangalore, Belgrade, Boston, Dubai, Paris, Riyadh, Zagreb, Naples**
- Channel Partners in all over **EMEA**
- **550+ employees** in RNTrust Group
- **Consistently profitable / Financially stable**
- RNTrust (RN ME FZ-LLC / RNT / Interdata / RN ITC LLC) is certified for **ISO/IEC 27001:2013 and ISO 9001:2015**.



**ISO/IEC
27001:2013
Certified**



RNTrust Entity Structure





RNTrust

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