

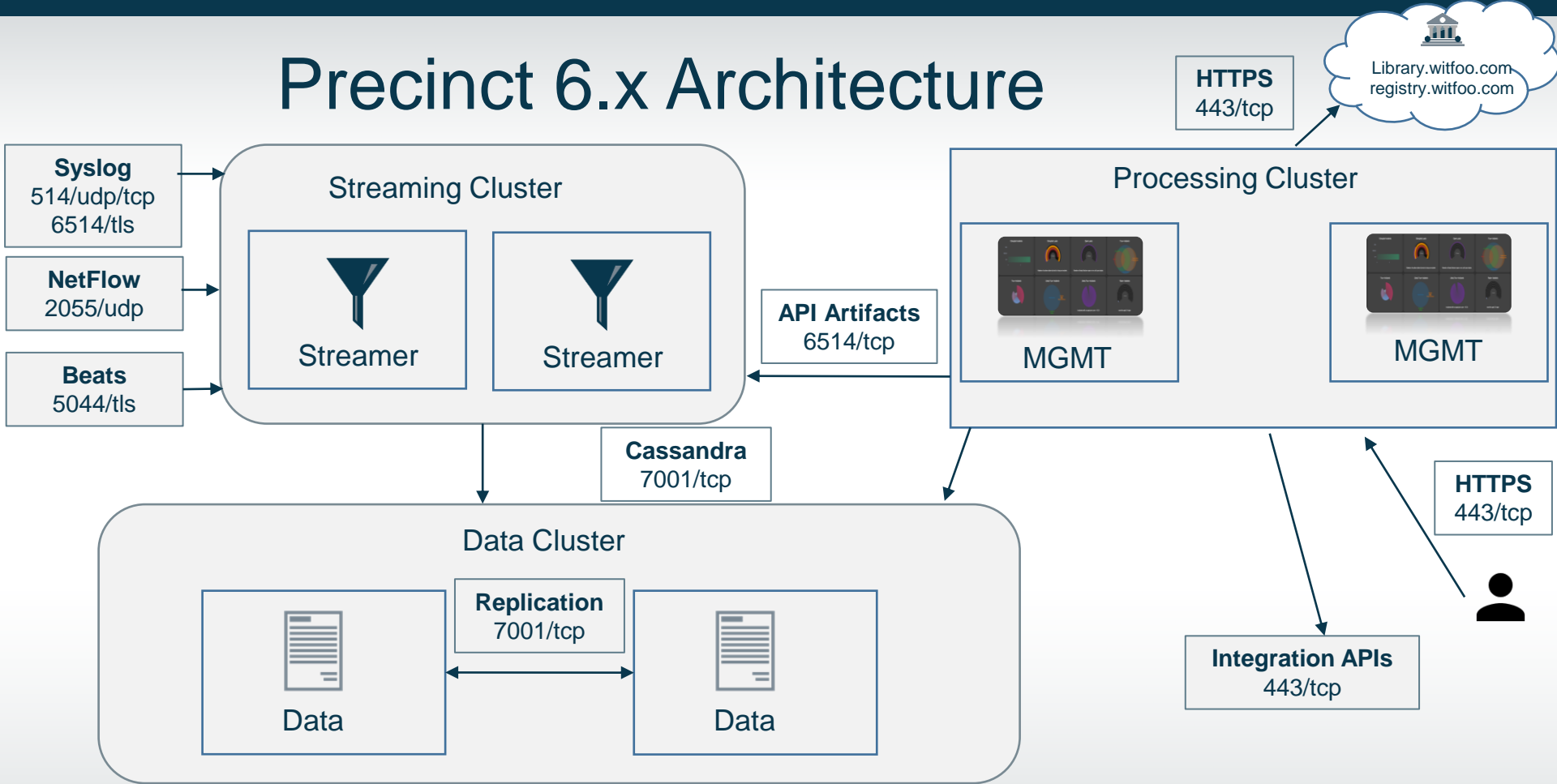
The logo for Witfoo, featuring the word "witfoo" in a white, lowercase, sans-serif font. The letter "i" has a small orange dot above it. The letters "o" and "o" are stylized with a slight gap between the top and bottom curves. The background is a dark blue gradient.

witfoo

Sizing & Scaling WitFoo Precinct 6.x

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Precinct 6.x Architecture



Data Variables

- Data Rate
- Average message size
- Message Compression Entropy
- Number of Parsers
- Complexity of Parser Logic
- Number of Transport types

Streamer Best Practices

- Memory is Critical – 8GB Minimum; 16GB is ideal
- Horizontal scale via specialization maximizes throughput
 - Transport (syslog, NetFlow, Beats, Kafka, Cloudwatch, etc)
 - Parsers (product types sending)
- Manage UDP Transports via UDP Replicator:
 - Cisco UDP Director
 - Plixer Flow Replicator
 - Samplicator (Open Source)
- /kafka partition must be 50GB or larger. Fast disk (SSD) helps

Management Best Practices

- 1 Node is Acceptable
- Multiple nodes can be placed behind a load balancer or used regionally
- Data queries are data-center aware

Cassandra Mechanics

- Load-balanced
- Automatic Replication
- Data Center Awareness
- Replication Factor 3
- Encrypted Transmission
- Data Compression
- Eventual Consistency = Using Quorum
- Data stored as JSON Objects
- Records grouped into partitions



Data Node Best Practices

- Start with 3 Data Nodes ; Add 1 node at a time (check status)
- Check Status: `sudo docker exec cassandra nodetool -u cassandra -pw cassandra status`
- Do not make /data partition larger than 2 TB
- /data partitions should be same size
- Allow 40% of /data partition to stay empty for GC
- Start with low retention settings; increase once reached
- Check available space by running `df /data`
- 8GB RAM minimum; 16GB ideal

Requesting Assistance

1. Ensure production data is being sent
2. Open a Support Ticket via Community or by emailing support@witfoo.com
3. Support will analyze system metrics and provide recommendations

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Security, Leveled Up.