

# SnapLogic IIP Performance

## Moving and transforming data at scale and with speed

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Organizations today are facing a tsunami of data being generated from their application endpoints, data stores, IoT endpoints, 3rd party sources, and many others. They are challenged with the speed and variety of new data along with the massive volume of the historical data. To handle both effectively they need a platform that can operate at enterprise scale. In this data sheet, we provide an overview of how SnapLogic Intelligent Integration Platform (IIP) meets your needs of moving data at scale and with speed.

### Snaplex Node

A key foundation of the SnapLogic platform is a powerful Snaplex node (server with an integration runtime) which can be deployed in the Cloud as a Cloudplex Node or behind the customer firewall on infrastructure managed by the customer as a Groundplex Node. SnapLogic offers nodes that go from medium (2vCPUs, 8GB RAM) to 2XL (16vCPUs, 64 GB RAM). SnapLogic nodes can also be deployed in a Docker container and managed via Kubernetes or Mesosphere or other infrastructure orchestration platforms. With SnapLogic, you also have an option to autoscale up and down your deployment using Kubernetes Helm Chart. You can leverage a SnapLogic node for your ETL processes from/to a variety of application and data endpoints or ELT workloads for your cloud data warehouse or to deploy an API Management gateway. A Snaplex can run following ETL processes: Scheduled Tasks, Triggered Tasks and Ultra Tasks. SnapLogic recommends that customers use a medium node to run up to 5 concurrent scheduled or 20 concurrent triggered tasks or 100 concurrent Ultra tasks. Let's see when and where to use them.

#### Scheduled Task

Scheduled tasks/pipelines, as the name implies, are scheduled to run at specific times during the day. Scheduled tasks fetch data from an application or data endpoint, transform it, and then send the transformed data often in large batches to another application, data store, or a data warehouse. Performance of scheduled tasks is dependent on the amount of data that is being moved and the most demanding workloads are the ones that involve moving data from a database to another data store such as a data lake or a data warehouse. To give you a sense of performance of the SnapLogic node, a medium size node can move 40 million rows of data from a database to a cloud data warehouse such as Snowflake in just 20 minutes.

#### Triggered Task

An automated business process or an end-to-end data pipeline that can be called from an external trigger is called a Triggered Task. Triggered Tasks are used for event driven processes and involve bringing up an instance of a pipeline, processing/transforming the incoming data and then tearing down the instance before sending back response to the external caller. Due to this setup and teardown, response time varies based on existing workload on the Snaplex Node. Typical response time for a Triggered Tasks is a few seconds. In a recent POC, Guild Education moved 970 MB, 1.5 million rows of employee data from a CSV file to Amazon S3 in just 35 seconds with SnapLogic, 70x faster than the competition.

#### Ultra Task

For ultra low latency and failsafe applications, SnapLogic offers Ultra Tasks. Ultra Task architecture uses two FeedMaster Nodes (which acts as a request Queue) and two Execution nodes in a redundant configuration to handle failure. An Ultra Task is always running on a Snaplex node and as a result compute resources are not consumed for setup and teardown. With an Ultra Task you get sub-second response time. Even a medium size node can handle over 1000 requests per second of a low-complexity pipeline or around 100 requests per second of a medium-complexity pipeline with SnapLogic Ultra.

### API Management

SnapLogic API Gateway as part of the API Management offering can run on a Cloudplex node or a Groundplex node. The API Gateway can manage APIs created on the SnapLogic platform as well as 3rd party APIs. The API Gateway enforces access control, traffic control and transformation policies for all APIs managed by the Gateway and adds minimal overhead. API response times are dependent on complexity of the underlying implementation. With a medium-sized Groundplex node, the API Gateway can handle on average 1000s of concurrent API calls for a low complexity implementation.

### Customer Deployment Examples

SnapLogic platform operates at a massive scale with over 3 Trillion JSON documents processed per month. Some of our largest customers even handle over 100 billion documents on a monthly basis. SnapLogic helps customers identify the number of nodes required for their deployment and number depends on following considerations.

- Number of pipelines running concurrently at peak
- Complexity of such pipelines (based on number of Snaps)
- Load (amount of data being moved from one endpoint to another)

*"Instead of taking five to six hours to push 150,000 records to an external endpoint, we were able to push three times that volume of information to the external endpoint in about two minutes."*

–Sr. Manager, Data Strategy and Architecture, Box

Here are a few examples of our customer deployments with 24 hour (Friday) statistics so that you can get a sense of scale and massive performance of the SnapLogic platform.

Customer and use cases	# of medium size production nodes	# of documents/ messages processed	# of pipeline executions
A transportation company: A combination of event and batch based data integration and real-time application integration use cases	6	44M	32K
A retail company: Data integration use case in large batches	2	26M	316
A digital media company: Real-time application integration with APIs	2	8M	99K

**SnapLogic Intelligent Integration Platform can meet your organizations needs of moving data and automatic processes at scale and with speed. To learn more, [request a demo here!](#)**

SnapLogic powers the automated enterprise. The company’s self-service, AI-powered integration platform helps organizations connect applications and data sources, automate common workflows and business processes, and deliver exceptional experiences for customers, partners, and employees. Thousands of enterprises around the world rely on the SnapLogic platform to integrate, automate, and transform their business. Learn more at [snaplogic.com](https://www.snaplogic.com).