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# INDXX GLOBAL CLOUD COMPUTING INDEX METHODOLOGY

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# 1. INDXX GLOBAL CLOUD COMPUTING INDEX

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## 1.1 INDEX DESCRIPTION

The Indxx Global Cloud Computing Index tracks the performance of companies that are in the Cloud Computing Industry. The Cloud Computing Industry is involved in the delivery of computing services-servers, storage, databases, networking, software, analytics and more over the Internet which is referred to as 'The Cloud'.

The index has a base date of November 8, 2013 with an initial value of 1,000.

The index will be available in the following version:

- Net Total Return

## 1.2 CREATION OF MASTER LIST

### 1.2.1 Initial Universe

To be eligible for inclusion in the Initial Universe, securities must have:

- Primary listing in Developed or Emerging Markets, excluding India. Developed and Emerging Markets are defined by Indxx in its 'Country Classification and Investability Requirements' document.
- A minimum market capitalization of \$ 200 million.
- A 6-month average daily turnover greater than or equal to \$2 million.
- Traded for at least 90% of the total trading days over the last 6 months on their respective stock exchanges, and at least 90% of the total trading days over the last 3 months for an Initial Public Offering ("IPO") security.

### 1.2.2 Free Float

All securities must meet one of the following criteria

1. A minimum free float equivalent to 10% of shares outstanding  
(or)
2. A minimum free float market capitalization of \$1 billion.

### 1.2.3 Maximum Price

Securities trading at a price of \$10,000 or above are ineligible for inclusion in the universe. This rule is not applicable for existing constituents. Existing constituents shall remain in the universe irrespective of their stock price.

### 1.2.4 Security Type

The following security types are eligible for inclusion:

- Common Stock

- ADR
- GDR

### 1.2.5 Share Classes

If multiple share classes exist for a company, then the most liquid share class is considered for inclusion in the portfolio.

## 1.3 SECURITY SELECTION PROCESS

Based on the extensive research, Indxx has defined Cloud Computing as being comprised of the following sub-themes:

Software as a Service (SaaS)	Companies that are involved in licensing and delivery of software over the internet on a subscription basis which is sometimes called as “on-demand software”.
Platform as a Service (PaaS)	Companies that are involved in providing a platform for creating software applications which are delivered over the internet.
Infrastructure as a Service (IaaS)	Companies that are involved in providing virtualized computing resources over the internet. The services include shared resources like shared storage, shared servers, storage pool etc.
Data Center REITs	Companies that are involved in owning and managing facilities that customers use to safely store data and offer a range of products and services to help keep servers and data safe, including providing uninterruptable power supplies, air-cooled chillers and physical security.
Cloud and Edge Computing Infrastructure/Cloud Infrastructure Components	Companies involved in manufacturing or distributing hardware components like chips that are built into servers, specialized network switches and routers etc. used in cloud and edge computing activities.

These sub-themes are comprised of companies in the following FactSet Industries:

Cable/Satellite TV	Packaged Software
Computer Communications	Real Estate Investment Trusts
Computer Peripherals	Recreational Products
Computer Processing Hardware	Telecommunications Equipment
Information Technology Services	Data Processing Services
Internet Retail	Major Telecommunications
Internet Software/Services	Semiconductors

The industries and sub-themes identified through this research-based approach are subject to change at the May semi-annual reconstitution.

In order to qualify for inclusion in the index, a company must either:

- Derive greater than or equal to 50% of its revenues from the sub-themes listed above (“Cloud Computing Companies”);
- Or
- Derive equal to or greater than \$500M from the provision of public cloud infrastructure (“Public Cloud Companies”). Public Cloud Companies are those that focus solely on providing public

cloud infrastructure rather than platforms that provide access to the public cloud services of third parties.

## 1.4 FINAL COMPOSITION

From the Selection List:

- Top 30 Cloud Computing Companies ranked by revenue percentage attributed to cloud computing, subject to the following considerations:
  - A maximum of five Data Center REITs can be included in the final index.
  - If two or more companies have the same revenue percentage, then the company with higher 6-month average daily turnover will be considered eligible for inclusion in the index.
- In addition, the top 10 Public Cloud Companies by revenue attributed to public cloud infrastructure are included in the Index. If there are fewer than 10 eligible Public Cloud Companies, all eligible Public Cloud Companies are included in the Index.

## 1.5 WEIGHTING

Cloud Computing Companies in the index are weighted as follows:

- Constituents are weighted based on their security-level market capitalization.
- The aggregate weight of Data Center REITs is capped at 10%.
- A single security cap of 4.00% and a single security floor of 0.3% is applied.

Public Cloud Companies in the index are weighted as follows:

- Constituents are weighted based on their security-level market capitalization.
- The aggregate weight of Public Cloud Companies is capped at 10%.
- A single security weight cap of 2% and a single security floor of 0.3% is applied.

## 1.6 BUFFER RULES

Buffer Rules are employed to reduce Portfolio Turnover. The following buffer rules apply:

### 1.6.1 Market Capitalization

A constituent shall continue to be included in the index if its market capitalization is greater than or equal to 80% of the previously defined market capitalization limit.

### 1.6.2 Liquidity

A constituent shall continue to be included in the index if its 6-month ADTV is greater than or equal to 70% of the previously defined liquidity limit.

### 1.6.3 Revenue

- An eligible Cloud Computing Company that is not currently an index constituent shall only be included in the index if it ranks 10<sup>th</sup> or higher by revenue derived from the sub-themes listed above. In this case, current index constituent that ranks last by revenue derived from the sub-themes is removed.
- A current index constituent that is a Cloud Computing Company will be removed from the index if it ranks 40<sup>th</sup> or lower by revenue derived from the sub-themes listed above. In this case, the highest ranking non-constituent by revenue will be added to the index.

## 1.7 RECONSTITUTION AND REBALANCING RULES

- The index follows a semi-annual reconstitution and rebalancing schedule. The new portfolio becomes effective on the close of business on the second Friday of May and November each year. This day is called the 'Effective Day'.
- The security selection and portfolio creation process start on the close of the nearest Friday falling at least one month before the effective day, called the 'Selection Day'. The selection list is created based on the data as of the Selection Day.
- Weights are calculated at the close of the seventh trading day prior to the Effective Day. Index Shares are frozen using weights as of this day.

## 1.8 CORPORATE ACTIONS

Indxx standard Corporate Actions for market cap weighted indices apply. The corporate action guidebook is present in the Announcements section of our website, under 'Index Documents'.

## 2. DISCLAIMER

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