

## Incident Reporting Form - RCA

<b>1. Letter/ Report Subject -</b>	Reporting of technical glitch to the exchange (BSE)
<b>Name of the Member-- Member Code -</b>	Zerodha Broking Limited BSE: 6498
<b>2. Designated Officer (Reporting Officer details)</b>	
<b>Name: Venu Madhav</b>	
<b>3. Date &amp; Time of Incident &amp; Incident duration</b>	10-02-2023, 12:33 PM, 28 minutes
<b>4. Incident Description &amp; chronology of events (please use additional sheets)</b>	Annexure 1
<b>5. Business Impact</b>	Annexure 2
<b>6. Immediate action taken (please give full details)(please use additional sheets if necessary)</b>	Annexure 3
<b>7. Date &amp; Time of Recovery</b>	10-02-2023, 01:01 PM
<b>8. Root Cause Summary (Pl attach the detailed Report separately)</b>	Annexure 4
<b>9. Back up measures available</b>	Annexure 5
<b>10. Details of long-term action (please give full details) (please use additional sheets if necessary)</b>	Annexure 6

### Annexure 1:

1. Order placement, order modifications, and order cancellations on our trading platform were impacted intermittently on BSE from 12:33 PM to 01:01 PM owing to what seems

to be an issue with one of the adapter's at Refinitiv's end (exchange empanelled RMS and OMS vendor).

2. The impact was on the order placement, order modifications, and order cancellations between 12:33 PM to 01:01 PM intermittently. The said issue did not affect all users, but only a set of users operating out of a particular Silo (Setup). The count of affected clients is provided below in Annexure 2.
3. The impacted users had the option of placing orders on NSE during the entire duration of the issue.
4. The issue was fixed by the Refinitiv team.

### **Annexure 2:**

There was an issue with the Order placement, order modifications, and order cancellations temporarily on Kite for some of our users.

1. A small section of our clients were impacted by the incident. Order placement issues between 12:33 PM to 01:01 PM intermittently impacted 10.7k clients on BSE and 77 clients in the BCD segment.
2. The issue was Intermittent. The users were able to place orders and modify/ cancel the orders post retries even when the issue was ongoing.
3. There were very few complaints (146 calls and 43 tickets across all segments).
4. Call and trade desk was open for the impacted users.
5. Customers were informed about the issue via a banner on the support portal, and a bulletin on our website.

### **Annexure 3**

1. We immediately notified the Refinitiv team by raising a ticket.
2. A [bulletin](#) was put up on our website informing clients about the issue.

# Bulletin

 Feed

**Bulletin**

[Circulars](#)

[Holiday calendar](#)

[Disclosures](#)

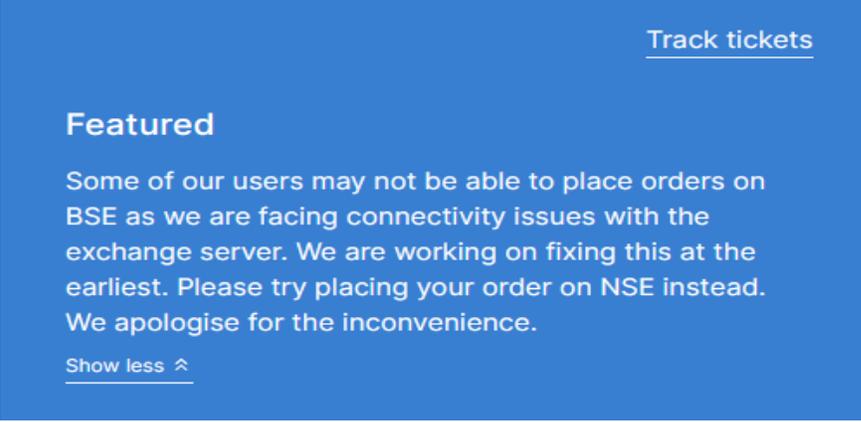
10 Feb 2023, 12:33 PM

## Connectivity issue with the exchange [Resolved]

Update [01:01 PM]: This issue has been resolved.

Some of our users may not be able to place orders on BSE as we are facing connectivity issues with the exchange server. We are working on fixing this at the earliest. Please try placing your order on NSE instead. We apologise for the inconvenience.

3. A banner was also put up on our Support portal.



The screenshot shows a blue banner with the following content:

- [Track tickets](#)
- Featured**
- Some of our users may not be able to place orders on BSE as we are facing connectivity issues with the exchange server. We are working on fixing this at the earliest. Please try placing your order on NSE instead. We apologise for the inconvenience.
- [Show less ^](#)

4. We added a message on IVR for the clients calling us on our support line to inform them about the issue.

### Annexure 4

The issue occurred due to network disconnection with BSE. After the disconnection, the Refinitiv process which controls exchange reconnection to BSE kept repeatedly doing Gateway Router login, but it was failing to establish reconnection to the exchange. Hence, the adapter was in not ready status for the time of the issue and the process had to be manually restarted to fix the issue. This was due to a bug in this particular version of Refinitiv's process. The same has been resolved in the 2.1.3.0 version and released to Zerodha.

**Annexure 5:**

1. We have spread our customers across multiple physically independent data centers, OMS installations, and many leased lines with backup lines. Hence only a fraction of users will be impacted in such scenarios.
2. We do have the option to manually reboot the servers as well as services/ applications in case of issues.
3. Call and trade desk is available for the impacted users.

**Annexure 6:**

Refinitiv's monitoring processes and systems are being reviewed to ensure better monitoring is in place to detect such issues early.