



Circular No.: IEX/MO/410/2021

Date: 22<sup>nd</sup> Oct 2021

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## Launch of Green Day Ahead Contract in Day Ahead Market Segment

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Dear Members,

In pursuance of Rules, Bye-Laws and Business Rules of the Exchange and Hon'ble CERC's order dated 17.10.2021 in Petition No. 146/MP/2021, the Members are hereby notified that: -

IEX is pleased to launch Green Day Ahead Contract (*hereinafter referred to as 'G-DAM' or 'GDAC'*) for **exclusive trade in Renewable Energy** along with existing Day Ahead Contract (*hereinafter referred to as 'DAM' or 'DAC'*) in the **integrated Day Ahead Market Segment** on its trading platform w.e.f. 26<sup>TH</sup> October 2021.

### **Eligibility for G-DAM:**

- (a) **Sellers:** **Renewable Energy sources** which are **generating electricity from renewable energy** shall be eligible to trade in G-DAM. **Renewable Energy Generators, Discoms, etc.** shall be eligible to trade in G-DAM subject to **issuance of NoC/Standing clearance by RLDC/SLDCs containing type of RE source Solar, Non-Solar and Hydro (HPO)** along with other details viz maximum quantum in accordance with the applicable regulations. RE Generators registered under REC mechanism shall not be eligible to participate in G-DAM segment.
- (b) **Buyers:** **All the entities** which are eligible to procure power through **Open Access** shall be eligible to participate in G-DAM as buyer. Buyers shall be eligible to participate in the G-DAM based on the same **NoC/Standing Clearance issued for Short term Open Access**. **No separate NoC is required** for the buyers.

### **Process details for G-DAM integrated with DAM:**

- (a) **Bidding:** **Integrated Bidding session** for Green Day Ahead Contract and Day Ahead Contract will start from **10.00 am to 12.00 pm on all seven (7) days of a week**. The Members may **opt for transfer of unsuccessful bids of Green Day Ahead Contract to Day Ahead Contract with same or different price**.
- (b) **Provisional bid matching process:** At the end of the bid session, the trading platform will seek to **match orders for each Contract sequentially** i.e. **first Green Day Ahead Contract** will be matched followed by Day Ahead Contract considering the uncleared bids of Green Day Ahead Contract, if any. **Provisional Market Clearing Price or Unconstrained MCP will be determined separately for Green Day Ahead Contract and Day Ahead Contract** based on the unconstrained scenario.
- (c) **Provisional obligation determination process:** The information regarding Provisional Market Clearing Price shall be sent to all Members. **All Buyers will have to keep funds ready as per the provisional obligation in their respective Settlement Account**.

- (d) **Delivery allocation determination process:** On the basis of Provisional Solution, the Exchange will send to the NLDC, combined requisition for Transfer Capabilities Verification and Reservation, across different transmission corridors for the successful bids in Green Day Ahead Contract and Day Ahead Contract.
- (e) **Final Bid matching:** Based on the ATC received from NLDC and funds made available by the Members in their Settlement Account, the Exchange will re-run the bid matching process sequentially i.e. first Green Day Ahead Contract will be matched followed by Day Ahead Contract considering the uncleared bids of Green Day Ahead Contract and balance ATC available after matching of Green Day Ahead Contract.
- (f) On the basis of final bid matching process as in (e) above the Exchange will generate the final result separately for Green Day Ahead Contract and Day Ahead Contract. In case of congestion, in various power transmission corridors, the solution shall be determined through market splitting process, which may result into different prices for different areas.
- (g) All other terms are as per existing DAM as per Schedule A of IEX Business Rules. The Contract shall be executed as per Contract Specification of Green Day Ahead Contract annexed as **Annexure-I**.
- (h) In case of real time curtailment, Day Ahead Contract shall be considered first for curtailment followed by Green Day Ahead Contract in terms of Rule 24 of the Business Rules.
- (i) For the purpose of compliance of Renewable Purchase Obligation (RPO) and Hydro Purchase Obligation (HPO), the Exchange shall provide detailed statement specifying the total quantity and proportion (solar/ non-solar/ hydro) in which Renewable Energy has been purchased by the successful buyer in Green Day Ahead Contract (GDAC).
- (j) The indicative timelines are as follows:

TIME	DETAILS
10.00 AM to 12.00 PM	Integrated Bid - session for G-DAM and DAM.
By 11.00 AM	• Funds pay out at D+1
By 12:20 PM	• Exchange to determine MCP of G-DAM & DAM sequentially & determining provisional obligations of the Members
By 1.00 PM	• Communication of combined Transmission Corridor required for G-DAM & DAM to NLDC and publishing results to market participants.
By 1.30 PM	• Communication to bank to confirm & block the funds pay in from Buyer Members; settlement account
By 2.00 PM	• NLDC to confirm available transmission corridor for scheduling. • Exchange will receive confirmation from bank for availability & blocking of clear balance.
By 2.30 PM	• Interaction with Members to ensure availability of funds. • Exchange to determine ACP sequentially for G-DAM and DAM based on final funds status & final ATC.
By 2.45 PM	• Exchange will issue to Members FINAL OBLIGATION
By 3.00 PM	• Exchange submits the application for scheduling of G-DAM & DAM to the NLDC • File to be sent by Exchange to banks for actual debits / Payin
By 5.30 PM	• NLDC conveys acceptance of scheduling of G-DAM and DAM

## Operational Details:

- (i) Members will have to install new MAT/TWS versions applicable from 26<sup>th</sup> October 2021 00:00 Hrs.
- (ii) Placing G-DAM Bids will be available in MAT/TWS under DAM menu, Participants will have option to select from drop down (DAM / G-DAM) in DAM sub menus such as Place Single Bid / Place Block Bid / Bid Upload etc.
- (iii) Matching and congestion management as per existing DAM methodology.
- (iv) Bid categories for Sellers – Solar, Non-Solar and Hydro.
- (v) Bid categories for Buyers – Renewable Purchase.
- (vi) Additional filters have been provided on bid book, Trade book, Price quantity Result, Portfolio Schedule Report, Portfolio Bid Status etc. to choose DAM/G-DAM.
- (vii) There will be separate quantity limit for sellers in each category i.e. Solar, Non-Solar and Hydro as per NOC provided to exchange by participants.
- (viii) Participants will have option to choose “Order Carry forward (OCF)” option at the time of placing bid.
- (ix) If OCF option is selected as “Yes” then bids those are not selected in G-DAM market will be carry /forwarded to DAM market and these bids will be the part of matching under DAM market.
- (x) If OCF option is selected as “NO” then any quantity not selected in G-DAM will not get carry forwarded to DAM Segment.
- (xi) OCF bids will be followed by either Premium or Discount for the purpose of determining bid price for carry forward orders to DAM market. Any premium or discount defined at the time of placing bid will be added or subtracted from the prices submitted in G-DAM segment. (Explained in Examples). OCF orders will be visible in DAM Single/Block bid book with details of applicable category.
- (xii) Single / Block Bid types will be available for G-DAM. Block bid linking, Minimum Quantity Block Bid and Profile Block Bid features will not be available for GDAM.
- (xiii) G-DAM bids quantity carry forwarded to DAM segment will not be available for carry forward to DAC under TAM segment.
- (xiv) Settlement
  - Pay-in/Pay-out cycles will be as per existing DAM settlement cycle and values of G-DAM Pay-in/Pay-out will be combined with DAM Pay-in/Pay-out.
  - Calculation of Average Turnover for margin collection/requirement will also include Buy turnover of G-DAM along with DAM.

## Examples:

### Sell bid with OCF / Premium

Particulars	Sub-Category	Qty	Price (Rs. / MWh)	OCF	Premium / Discount	OCF Value (Rs. / MWh)
GDAM Bid Qty Placed	Solar	-200	3000	Yes	Premium	100
GDAM Executed Qty		-40				
GDAM OCF Qty to DAM		-160	3100			

In above example, User has placed single bid GDAM segment under Solar category for sell and selected

OCF with Premium of Rs. 100 / MWh. Executed quantity in GDAM segment for above user is 40 MWh, hence OCF quantity for DAM segment will be 160 MW @ 3100 Rs./MWh (=3000 + 100). In similar way if Discount value is defined by user it will be subtracted from bid price at the time of OCF order placement in DAM.

#### Buy bid with OCF / Discount

Particulars	Sub-Category	Qty	Price (Rs. / MWh)	OCF	Premium / Discount	OCF Value (Rs. / MWh)
GDAM Bid Qty Placed	Renewable Purchase	200	3000	Yes	Discount	100
GDAM Executed Qty		40				
GDAM OCF Qty to DAM		160	2900			

In above example, User has placed single bid GDAM segment under Renewable Purchase category for Buy and selected OCF with Discount of Rs. 100 / MWh. Executed quantity in GDAM segment for above user is 40 MWh, hence OCF quantity for DAM segment will be 160 MW @ 2900 Rs./MWh (=3000 - 100). In similar way if Premium value is defined by user it will be added to bid price at the time of OCF order placement in DAM.

All members are requested to upgrade their trading terminals MAT/TWS to newer versions as older versions will stop functioning with applicability of new version.

Installation Steps are provided in **Annexure - A** for downloading the required setup to participate in trading.

**For and on behalf of  
Indian Energy Exchange Limited**

(Sd/-)  
**Amit Kumar**  
**Senior Vice President**  
**(Market Operations)**

-----Corporate office-----  
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CIN: L74999DL2007PLC277039

## Annexure-I

### Green Day-Ahead contract specifications

1.	Product definition	96 separate fifteen-minute time blocks throughout the following delivery day (D).
2.	Trading system	IEX trading system
3.	Auction timings	10:00 AM to 12:00 PM of previous day (D-1)
4.	Minimum volume	0.1MW (Minimum allowable quantity for buy/ sell in the standing clearance, it should not be less than this quantity)
5.	Minimum volume step	0.1 MW
6.	Minimum quotation step	Rs. 1 per MWh
7.	Quotation method	Double sided close bid auction with uniform Market Clearing Price for all buyers and sellers.
8.	Delivery point	Periphery of Regional Transmission System in which the grid-connected entity is located.
9.	Settlement	Daily settlement at ACP x volume traded in MWh (by the Client or Member as the case may be). Final settlement adjusted for any force majeure deviations.
10.	Transmission charges	<p>a) Regional Transmission System: As Per Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.</p> <p>b) State Transmission System: As per the concerned State Electricity Regulatory Commission's Regulations/ CERC (Open access in ISTS) Regulations, 2008, as amended from time to time.</p>
11.	Transmission losses	Payable in kind from delivery point to its grid connection point, as applicable.
12.	Eligibility	<p>Sellers: NOC issued by respective LDC specifying maximum quantum and source of Renewable Energy Generation (e.g. Solar, Non-Solar, HPO etc.)</p> <p>Buyers: All eligible Open Access buyers.</p>

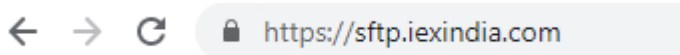
## Annexure A

### Software Installation Guide for GDAM- LIVE Session

#### Steps for TWS/MAT Application Installation:

##### Step1: Download the setup of TWS/ MAT from SFTP Server

- Access IEX SFTP Server by accessing URL '<https://sftp.iexindia.com>' by your given user ID and password.



- Access the path “MEMBER COMMON/GDAM-LIVE-SETUP/” as shown below.



#### MEMBER COMMON

Parent Directory   New Directory   Open   Upload   Download   Delete   More Actions		
Name	Size	Time
DOCS		13/04/2020, 00:29:00
GDAM-LIVE-SETUP		21/10/2021, 13:25:11



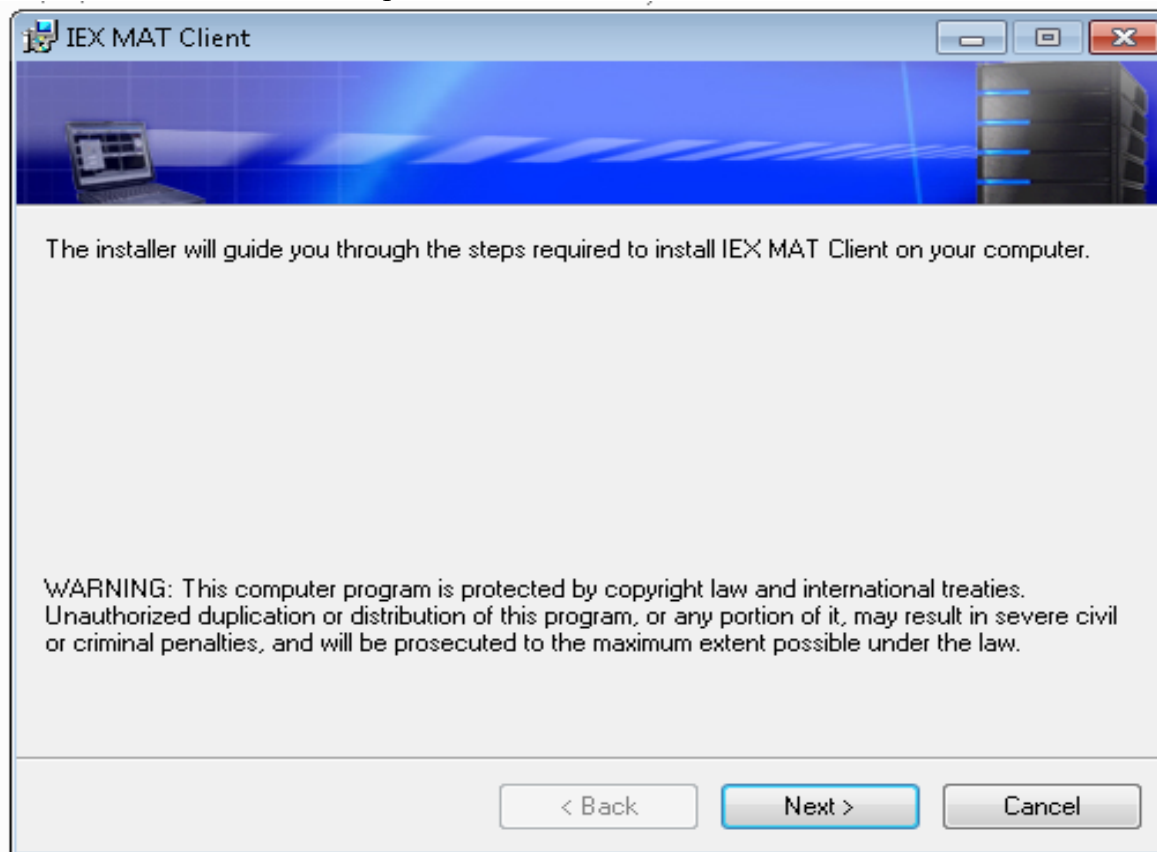
#### GDAM-LIVE-SETUP

Parent Directory   New Directory   Open   Upload   Download   Delete   More Actions		
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SetupTWS.msi	11.98 MB	08/10/2021, 15:42:38

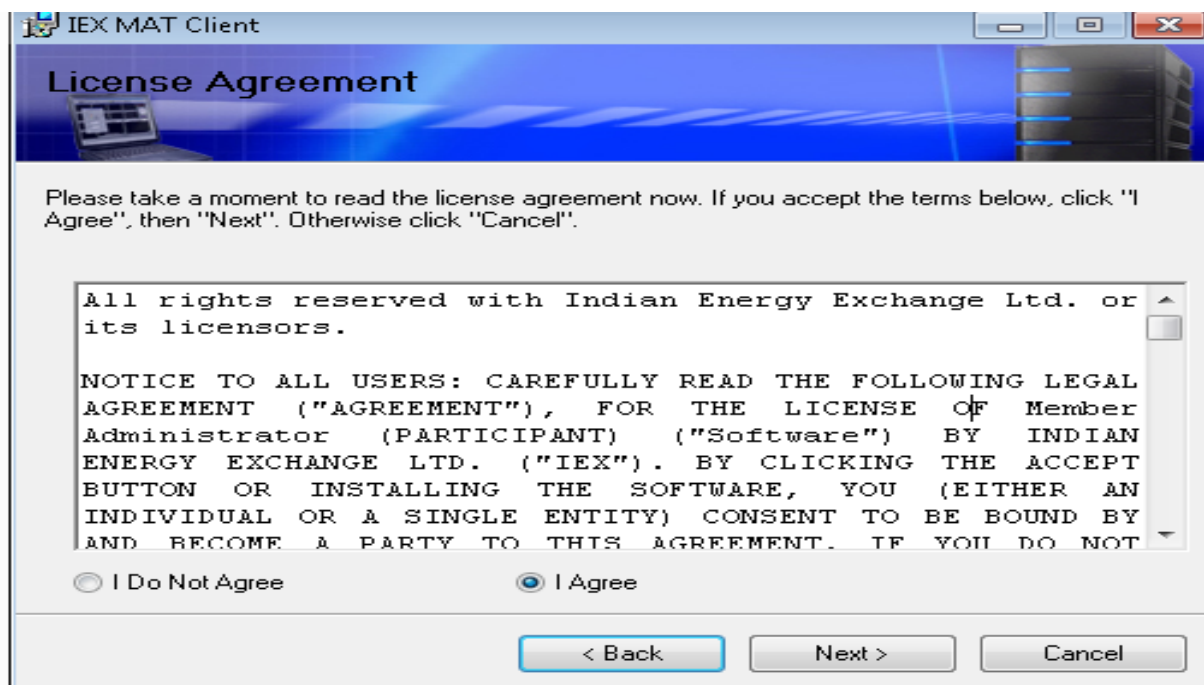
- Download the MAT and TWS setup.msi by right click & download tab.

## Step2: Installation Steps for MAT Application

- Run/Double click on setup and Click on “Next” tab.



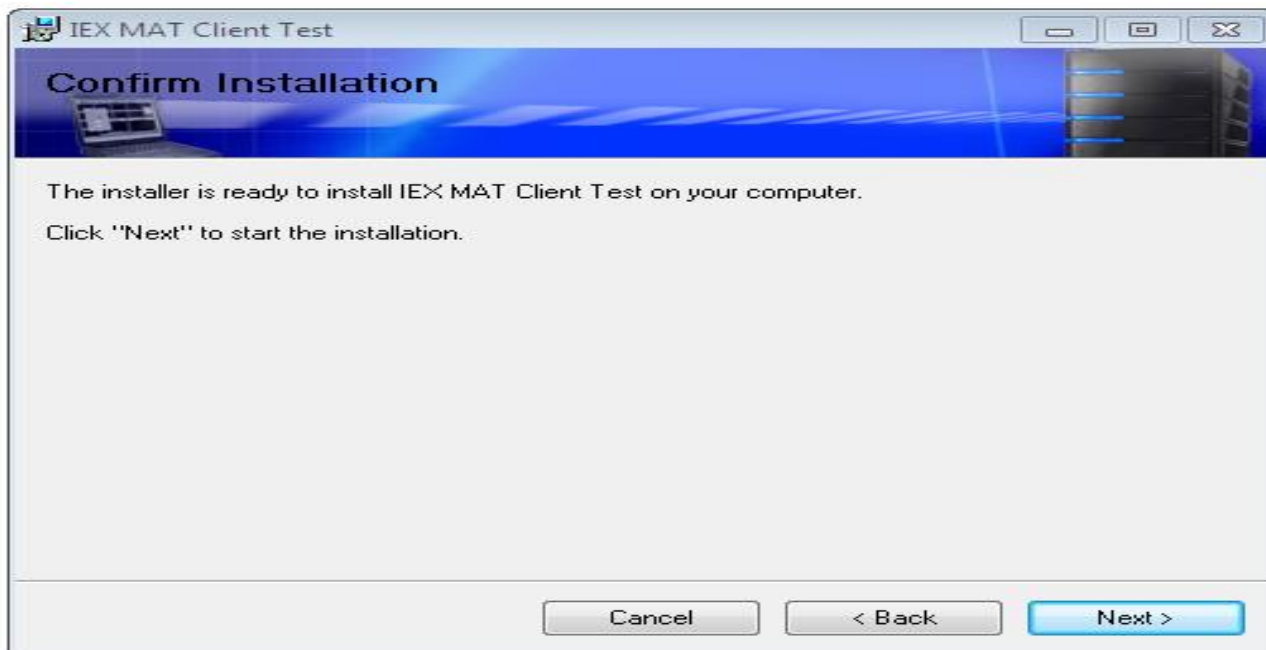
- Select “I Agree” and click on “Next” tab.



- “Select Installation Folder” and click on “Next” tab.

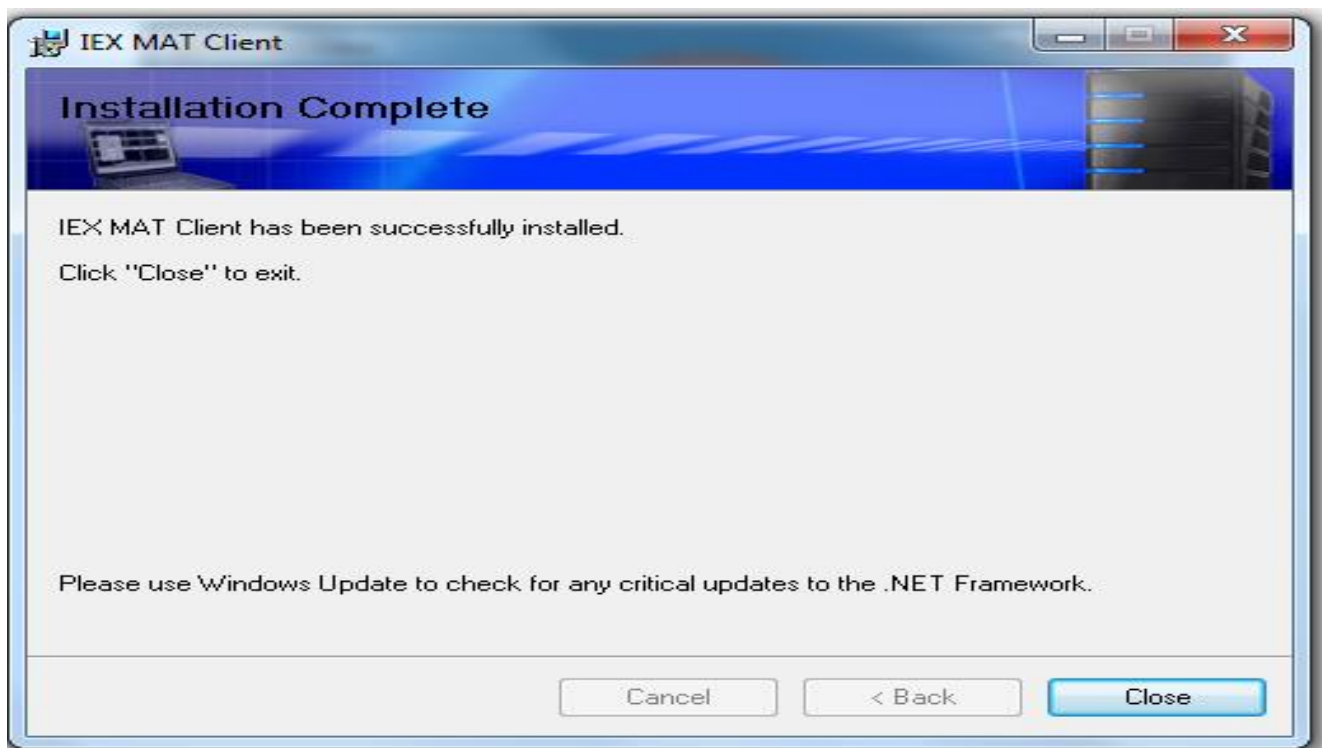


- Click on “Next” tab.

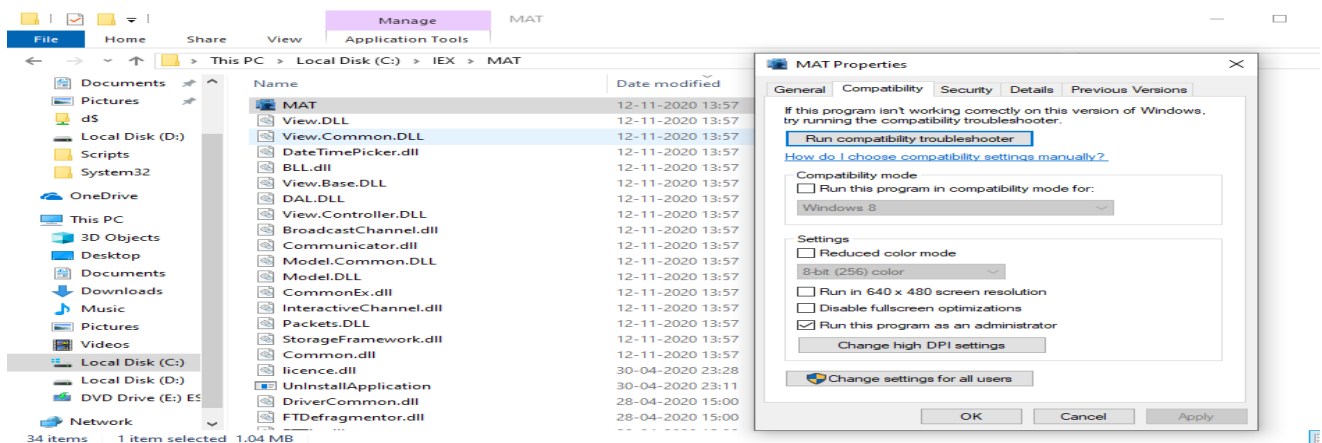




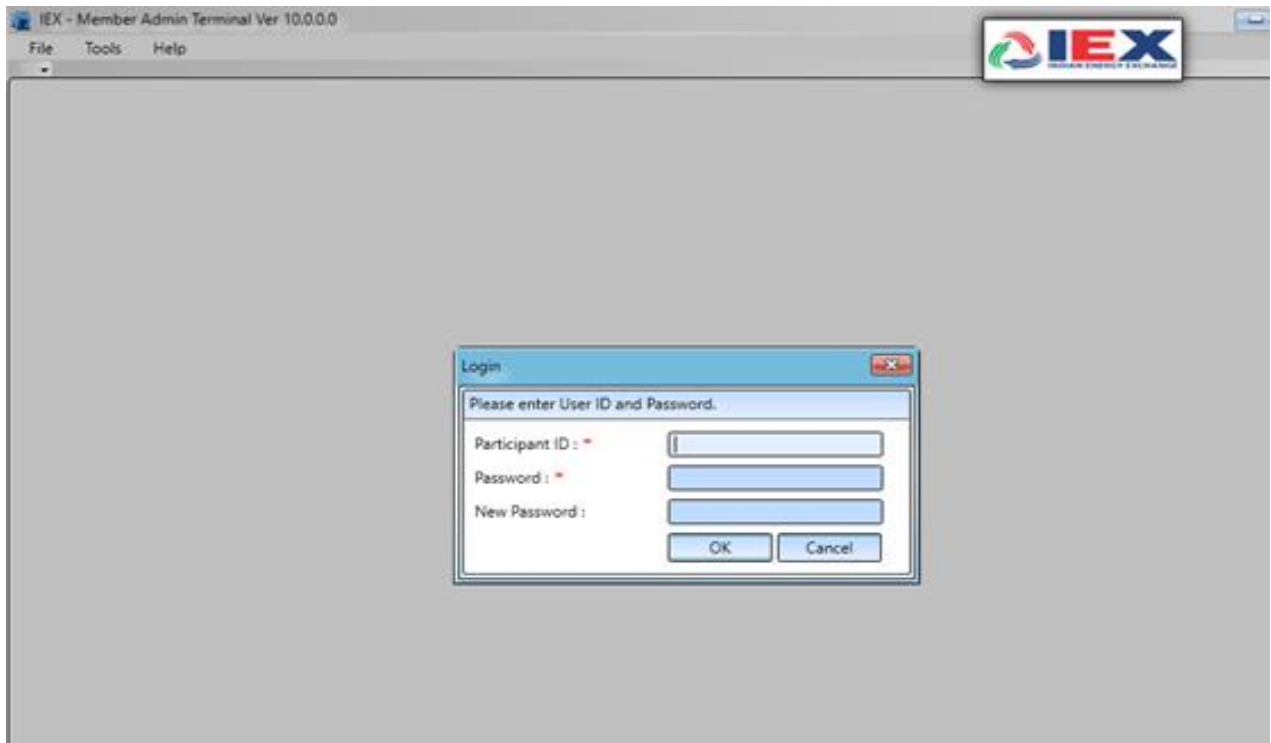
- After installation process click on “Close” tab. MAT application has been installed.



- To Select the Compatibility section please follow the steps as shown below.  
Please navigate the path “C:\ IEXTEST\MAT” folder path & Select “MAT” object right click select the “properties” tab.  
Same will open new window, navigate to Compatibility tab and check the “Run this program as an administrator”



- Please verify MAT version '10.0.0.0' refer below screen shot.



**Step 3:** Please follow same installation steps for 'setup TWS' installation.

After installation verify Trader Workstation Version as '10.0.0.0', refer below screenshot.  
Double Click on TWS Icon on your Desktop screen

