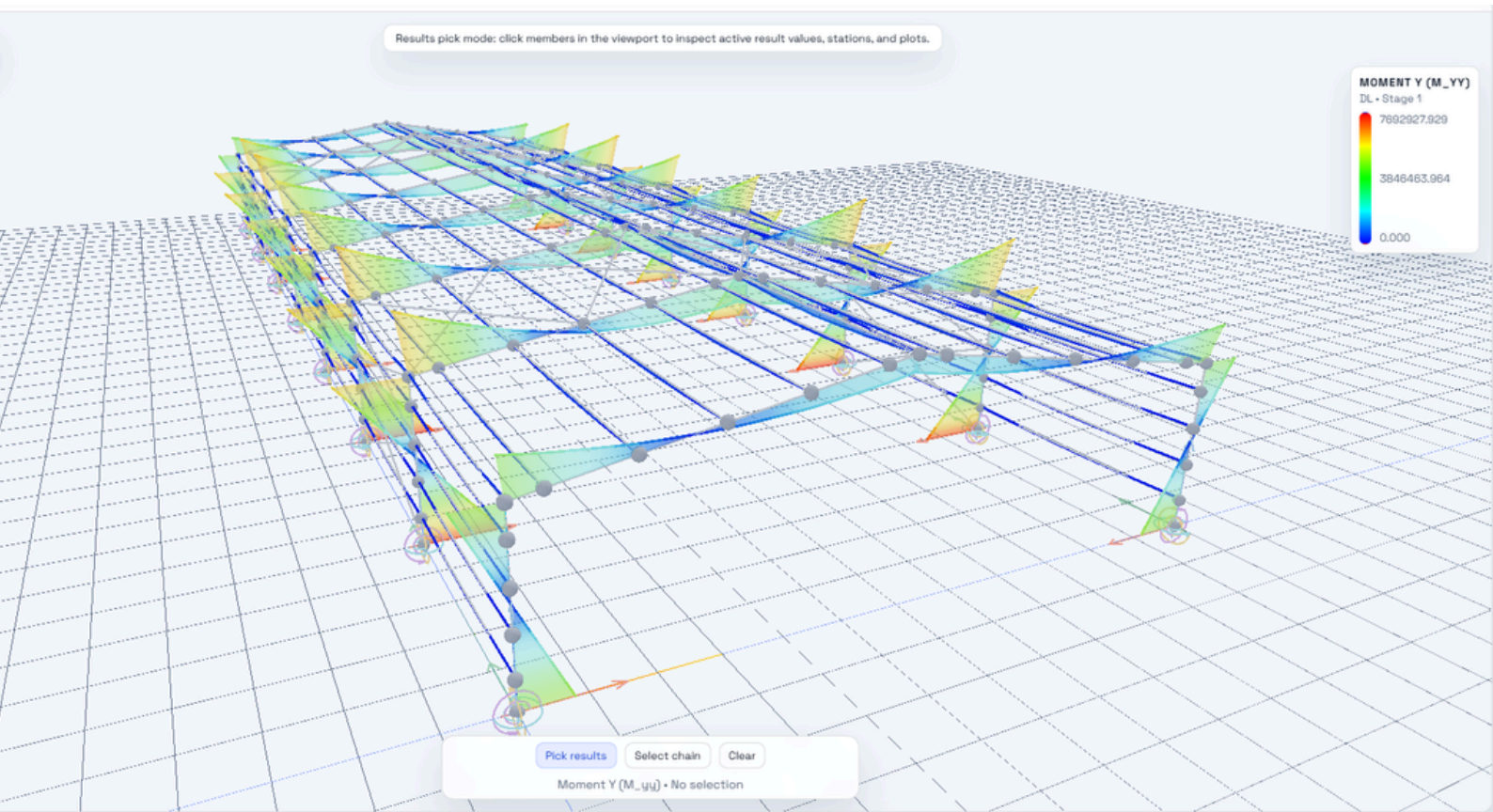




# GenFEA<sup>↑</sup>

Structural Analysis and  
Design Software

## GenFEA Web Instruction Guide



April  
2026

# Table of Contents

---

01 Access GenFEA Web

---

02 Access GenFEAx Desktop

---

03 Analysis Workflow

---

04 GenFEA Web Tips

---

## Access GenFEA Web

**GenFEA Web** is a browser-based pre- and post processor for Structural Analysis and Design data.

It provides 3D structural / analytical modelling; and analytical result visualisation environments.

BIMWERX FEA also provides **GenFEAx Desktop**, an analysis engine run on local desktop that connects with GenFEA Web for end-to-end **Modeling → Analysis → Results** workflows

GenFEA Web is free to use.

GenFEAx provides free tiers, and require paid subscriptions for larger and more complex analysis tasks.

For **Free** (including Student licensing) and **Paid** GenFEAx tiers, you'll need to register on the GenFEAx License Portal.

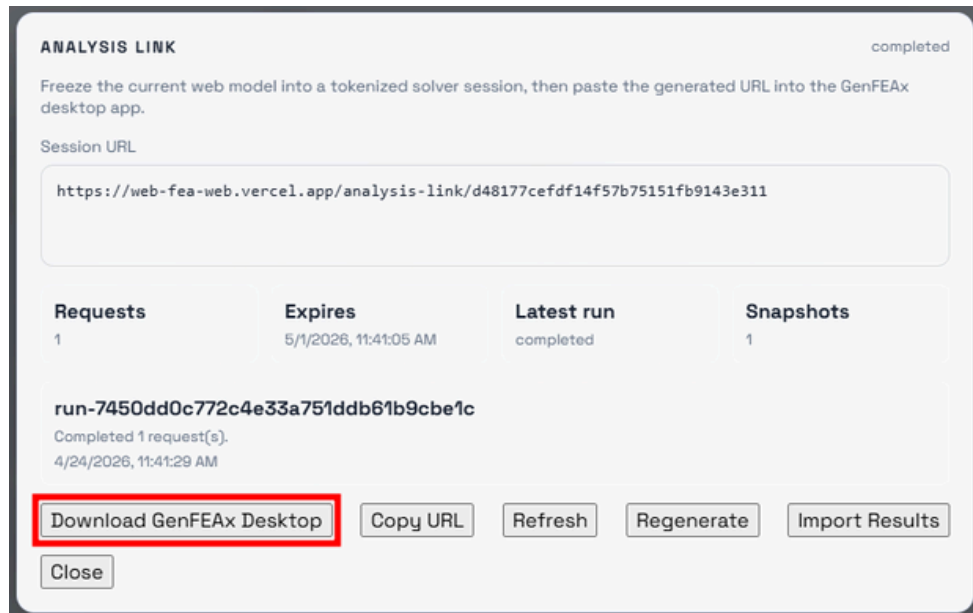
### Platform Access:

- GenFEA Web: <https://web-fea-web.vercel.app/>
- GenFEAx Desktop App:  
<https://bimwerxfea.com/download/GenFEAx%20Desktop.zip>
- GenFEAx Licensing: <https://bimwerxfea.com/genfeax/>

**Note:** GenFEAx is a portable app, and does not require an install.

# Access GenFEAx Desktop

- You can download the GenFEAx Desktop app for Windows from the GenFEA Web Analysis Link dialog:



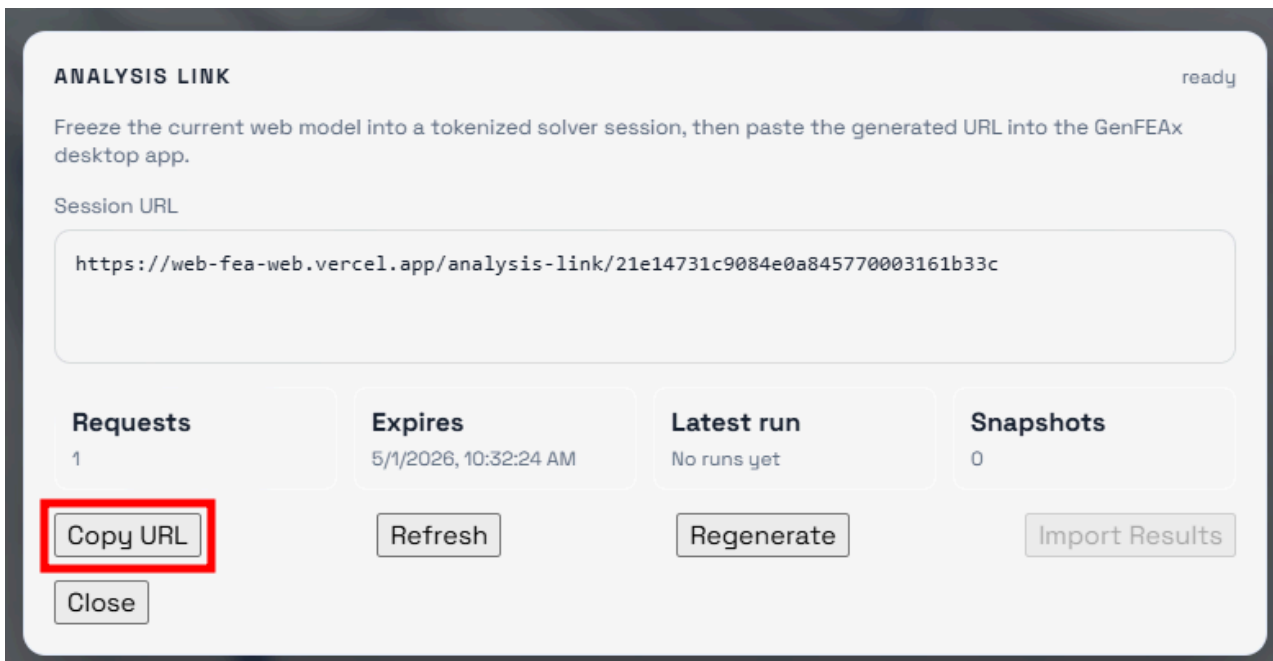
- Or, directly from this link:  
<https://bimwerxfea.com/download/GenFEAx%20Desktop.zip>
- GenFEAx Desktop does not require installation, to run it, simply launch [GenFEAx.Web.Desktop.exe](#) from the unzipped folder
- Create a shortcut if required

Name	Status	Date modified	Type	Size
Assets	🔄	24/04/2026 11:16 am	File folder	
genfeax	🔄	24/04/2026 11:16 am	File folder	
GenFEAx.Bridge.Contracts.dll	🔄	22/04/2026 2:13 pm	Application extens...	123 KB
GenFEAx.Licensing.dll	🔄	16/04/2026 1:41 pm	Application extens...	35 KB
GenFEAx.Licensing.xml	🔄	16/04/2026 1:41 pm	Microsoft Edge H...	1 KB
GenFEAx.Web.Desktop.dll	🔄	24/04/2026 10:00 am	Application extens...	242 KB
<b>GenFEAx.Web.Desktop.exe</b>	🔄	24/04/2026 10:00 am	Application	174 KB
GenFEAx.Web.Desktop.runtimeconfig.json	🔄	22/04/2026 7:47 pm	JSON File	1 KB

- Create a shortcut if required

# Analysis Workflow

- Once you have created your analytical model, select the **'Analysis Link'** tool from the GenFEA Web menu located at the top of the screen.
- The Analysis Link dialog will display and generate your session token and URL
- Once your token and URL is generated, click on **'Copy URL'** and start GenFEAx Desktop app on your local machine



**ANALYSIS LINK** ready

Freeze the current web model into a tokenized solver session, then paste the generated URL into the GenFEAx desktop app.

Session URL

```
https://web-fea-web.vercel.app/analysis-link/21e14731c9084e0a845770003161b33c
```

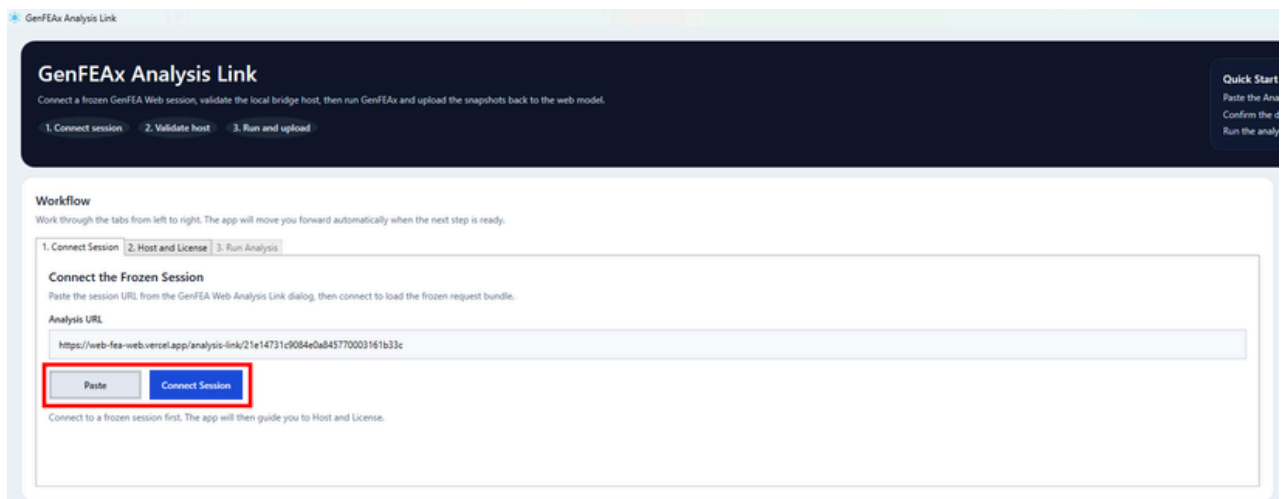
<b>Requests</b> 1	<b>Expires</b> 5/1/2026, 10:32:24 AM	<b>Latest run</b> No runs yet	<b>Snapshots</b> 0
----------------------	---	----------------------------------	-----------------------

**Copy URL**   **Refresh**   **Regenerate**   **Import Results**

**Close**

# Analysis Workflow

- In GenFEAx Desktop, click ‘[Paste](#)’ and then ‘[Connect Session](#)’
- If you have logged into your GenFEAx license in earlier sessions, then the app will skip step 2 - [License Login](#), otherwise, follow the license login steps on the next page

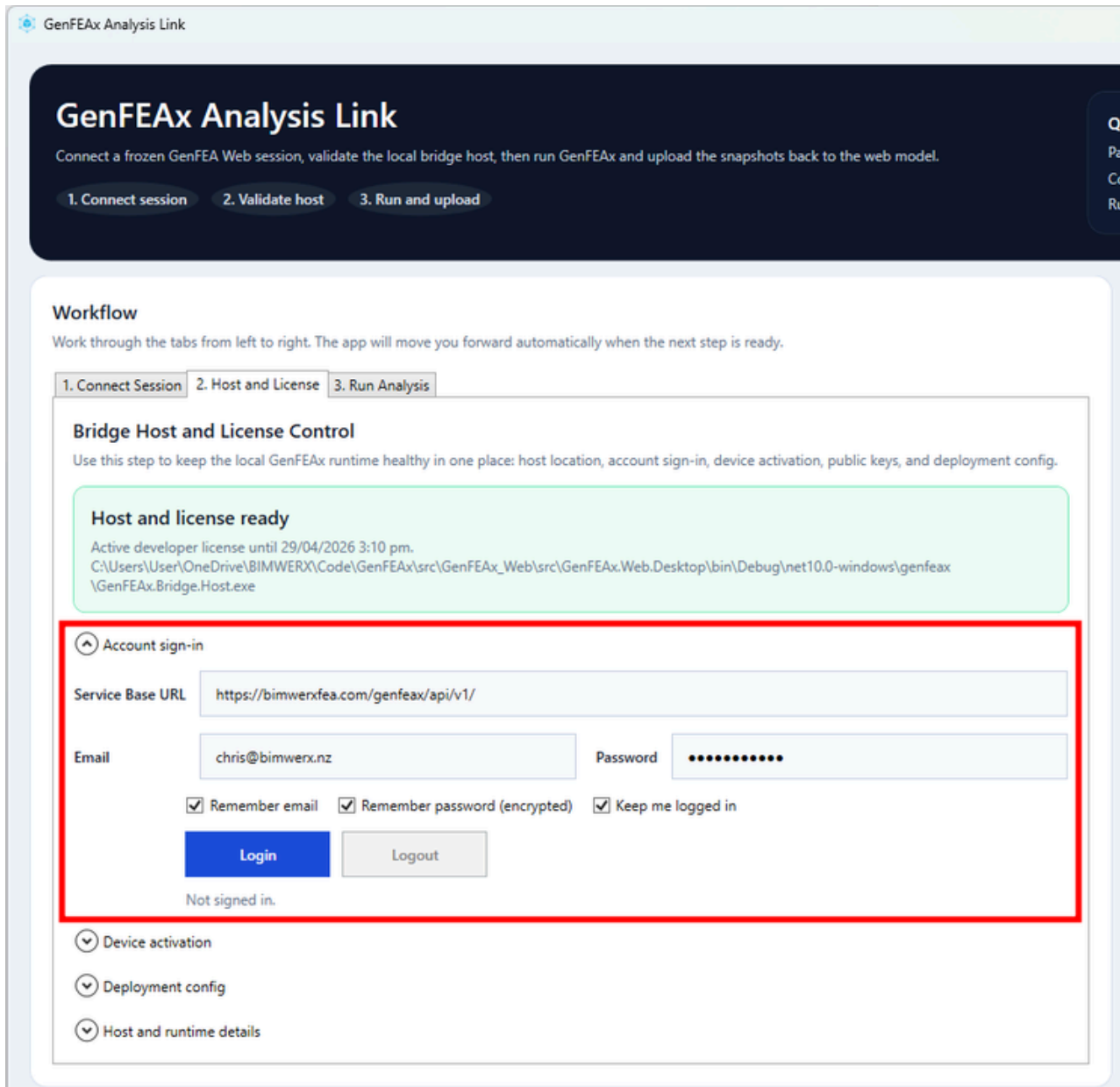


# Analysis Workflow

- GenFEAx requires a license to use, whether **Free** (including Student) or **Paid** tiers, register here:

<https://bimwerxfea.com/genfeax/>

- Use your GenFEAx Licensing credentials to log into your license:



GenFEAx Analysis Link

## GenFEAx Analysis Link

Connect a frozen GenFEAx Web session, validate the local bridge host, then run GenFEAx and upload the snapshots back to the web model.

1. Connect session 2. Validate host 3. Run and upload

### Workflow

Work through the tabs from left to right. The app will move you forward automatically when the next step is ready.

1. Connect Session 2. Host and License 3. Run Analysis

#### Bridge Host and License Control

Use this step to keep the local GenFEAx runtime healthy in one place: host location, account sign-in, device activation, public keys, and deployment config.

##### Host and license ready

Active developer license until 29/04/2026 3:10 pm.  
C:\Users\User\OneDrive\BIMWERX\Code\GenFEAx\src\GenFEAx\_Web\src\GenFEAx.Web.Desktop\bin\Debug\net10.0-windows\genfeax\GenFEAx.Bridge.Host.exe

##### Account sign-in

Service Base URL

Email  Password

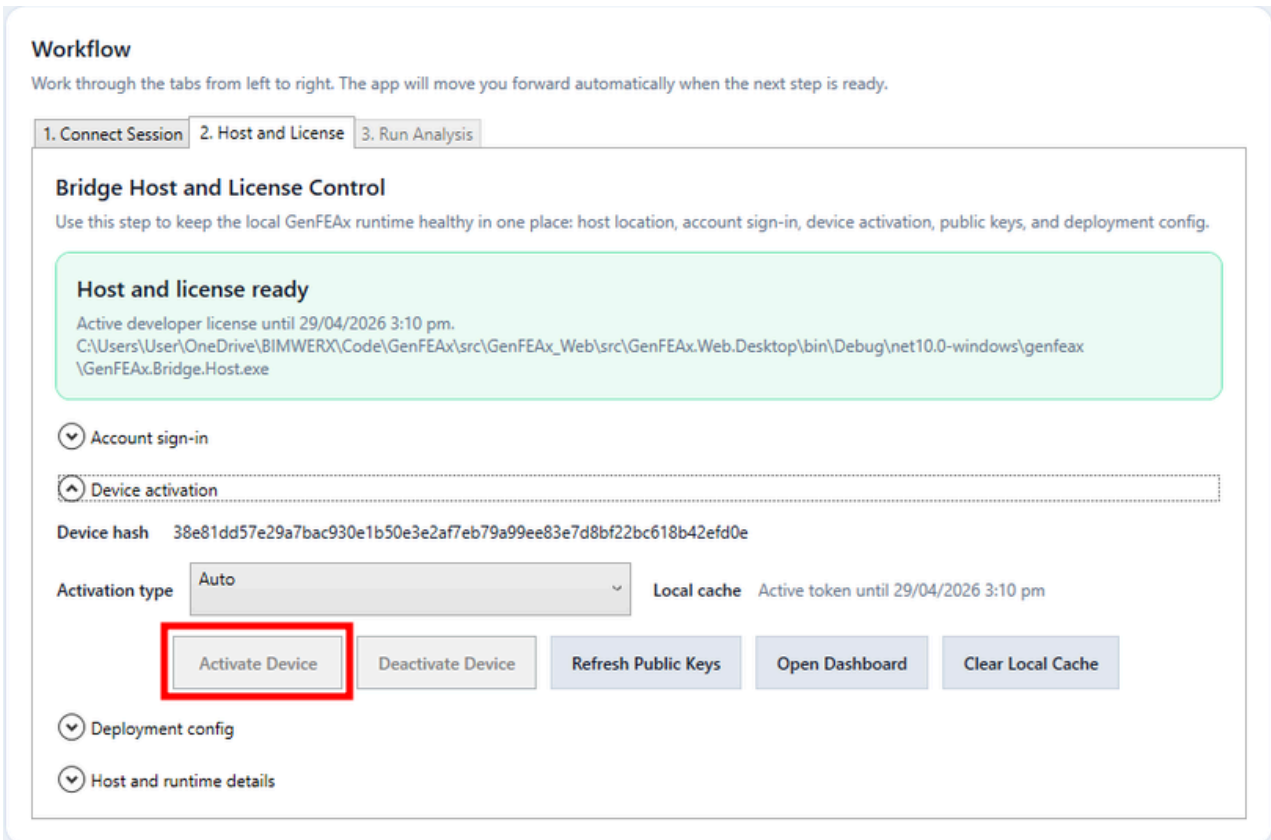
Remember email  Remember password (encrypted)  Keep me logged in

Not signed in.

Device activation  
 Deployment config  
 Host and runtime details

# Analysis Workflow

- Now click '[Activate Device](#)' to activate your license on the current device:



**Workflow**  
Work through the tabs from left to right. The app will move you forward automatically when the next step is ready.

1. Connect Session 2. Host and License 3. Run Analysis

### Bridge Host and License Control

Use this step to keep the local GenFEAx runtime healthy in one place: host location, account sign-in, device activation, public keys, and deployment config.

**Host and license ready**  
Active developer license until 29/04/2026 3:10 pm.  
C:\Users\User\OneDrive\BIMWERX\Code\GenFEAx\src\GenFEAx\_Web\src\GenFEAx.Web.Desktop\bin\Debug\net10.0-windows\genfeax\GenFEAx.Bridge.Host.exe

Account sign-in

Device activation

Device hash 38e81dd57e29a7bac930e1b50e3e2af7eb79a99ee83e7d8bf22bc618b42efd0e

Activation type  Local cache Active token until 29/04/2026 3:10 pm

[Activate Device](#) [Deactivate Device](#) [Refresh Public Keys](#) [Open Dashboard](#) [Clear Local Cache](#)

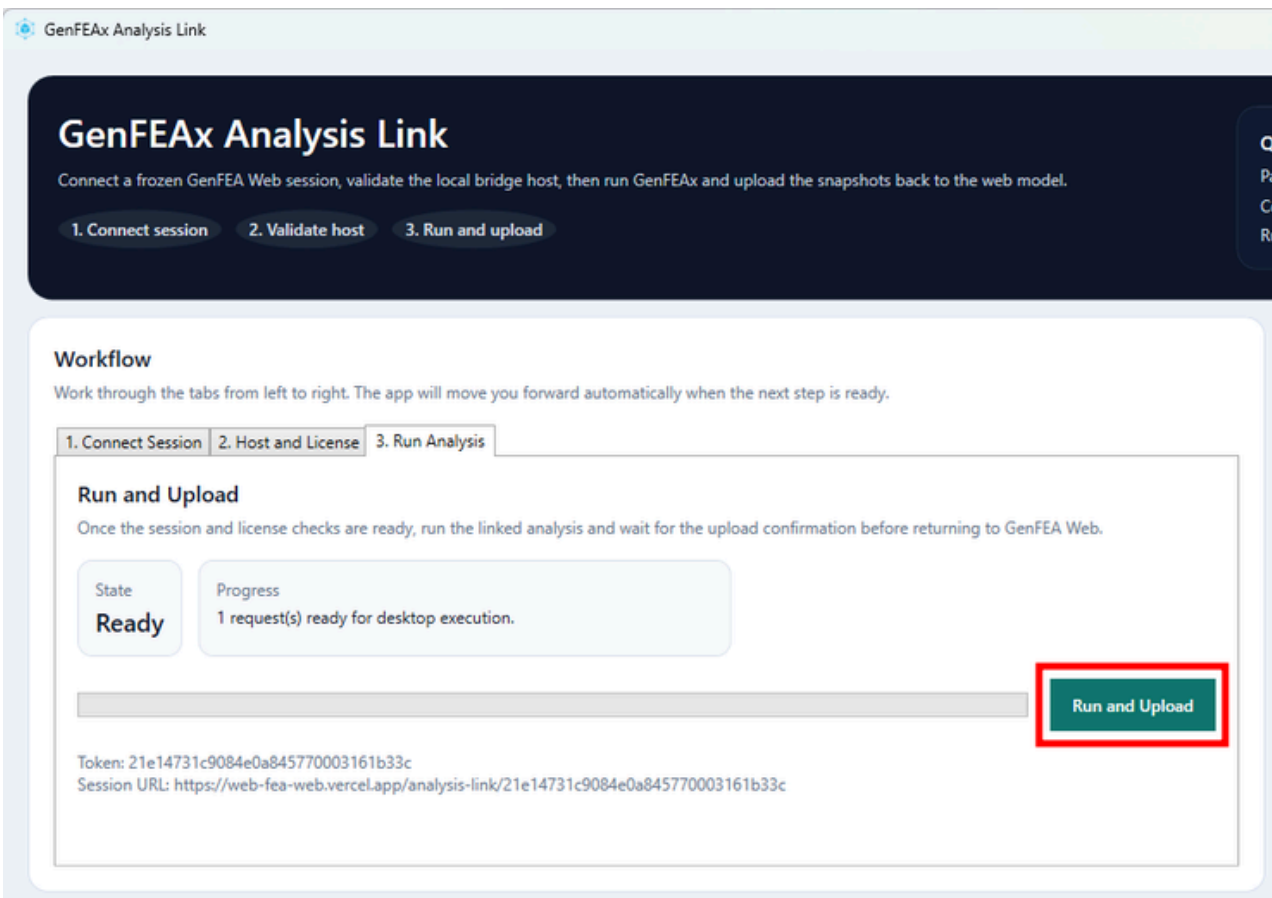
Deployment config

Host and runtime details

- You can now use GenFEAx on this device, proceed to the next step - [Running Analyses](#)

# Analysis Workflow

- To run the analysis, click ‘[Run and Upload](#)’ and wait for the process to finish



GenFEAx Analysis Link

## GenFEAx Analysis Link

Connect a frozen GenFEA Web session, validate the local bridge host, then run GenFEAx and upload the snapshots back to the web model.

1. Connect session
2. Validate host
3. Run and upload

### Workflow

Work through the tabs from left to right. The app will move you forward automatically when the next step is ready.

1. Connect Session
2. Host and License
3. Run Analysis

#### Run and Upload

Once the session and license checks are ready, run the linked analysis and wait for the upload confirmation before returning to GenFEA Web.

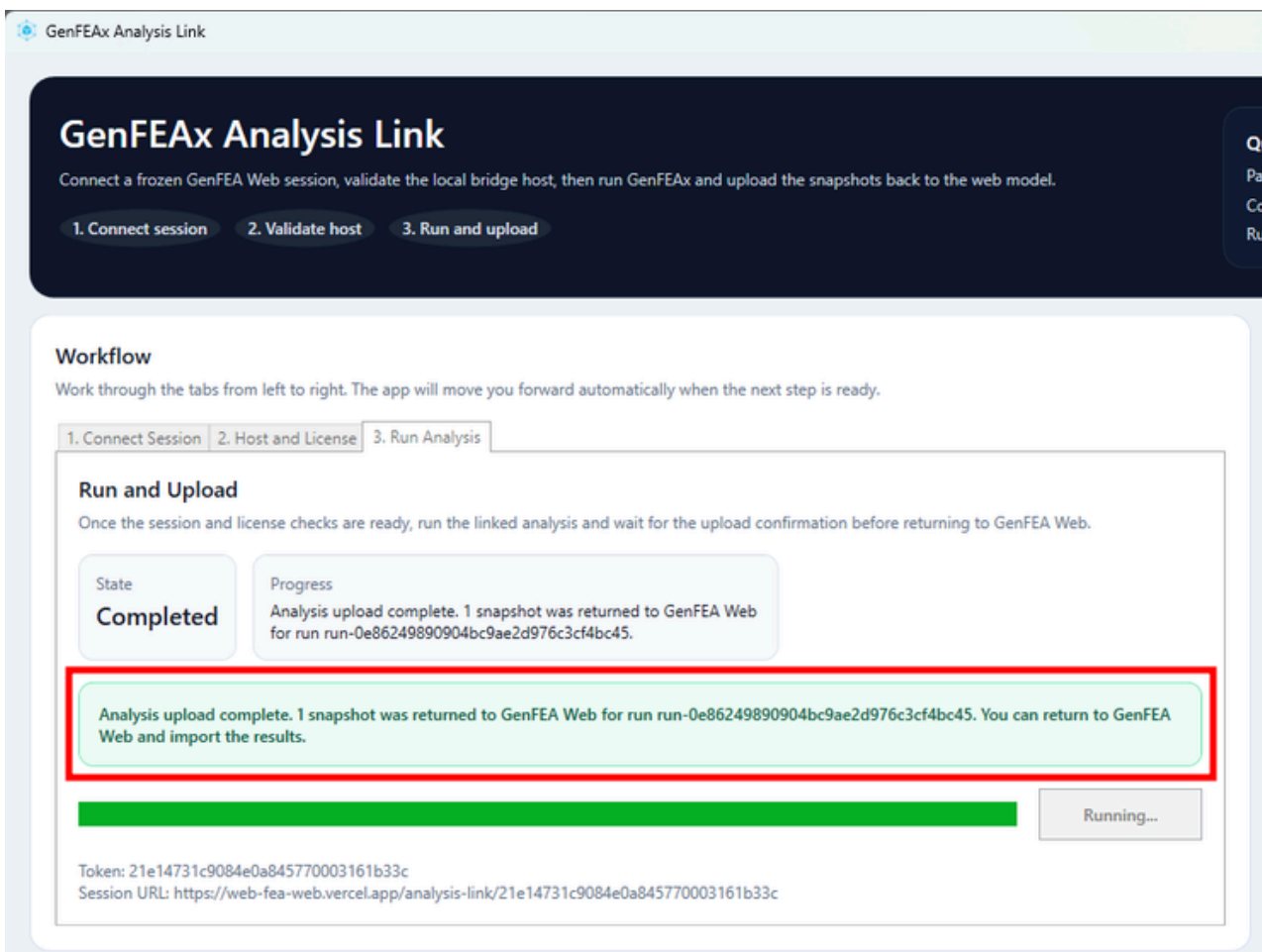
State	Progress
<b>Ready</b>	1 request(s) ready for desktop execution.

[Run and Upload](#)

Token: 21e14731c9084e0a845770003161b33c  
Session URL: <https://web-fea-web.vercel.app/analysis-link/21e14731c9084e0a845770003161b33c>

# Analysis Workflow

- Once the operation completes, a notification message will appear



The screenshot displays the 'GenFEAx Analysis Link' interface. At the top, it lists three steps: '1. Connect session', '2. Validate host', and '3. Run and upload'. The 'Run and Upload' step is active, showing a 'State' of 'Completed' and a 'Progress' bar that is fully green. A red box highlights a notification message: 'Analysis upload complete. 1 snapshot was returned to GenFEA Web for run run-0e86249890904bc9ae2d976c3cf4bc45. You can return to GenFEA Web and import the results.' Below the progress bar is a 'Running...' button. At the bottom, the token and session URL are displayed.

GenFEAx Analysis Link

## GenFEAx Analysis Link

Connect a frozen GenFEA Web session, validate the local bridge host, then run GenFEAx and upload the snapshots back to the web model.

1. Connect session
2. Validate host
3. Run and upload

### Workflow

Work through the tabs from left to right. The app will move you forward automatically when the next step is ready.

1. Connect Session
2. Host and License
3. Run Analysis

#### Run and Upload

Once the session and license checks are ready, run the linked analysis and wait for the upload confirmation before returning to GenFEA Web.

State: **Completed**

Progress: Analysis upload complete. 1 snapshot was returned to GenFEA Web for run run-0e86249890904bc9ae2d976c3cf4bc45.

Analysis upload complete. 1 snapshot was returned to GenFEA Web for run run-0e86249890904bc9ae2d976c3cf4bc45. You can return to GenFEA Web and import the results.

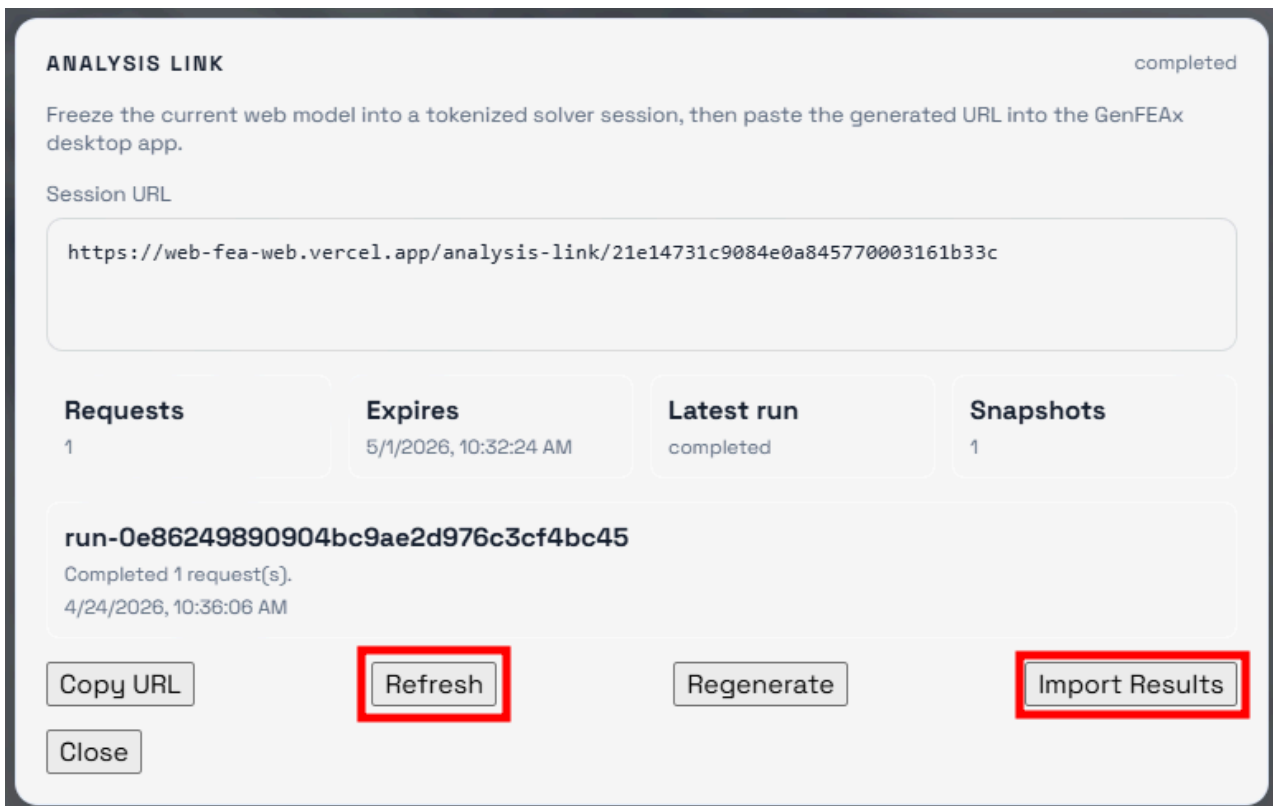
Running...

Token: 21e14731c9084e0a845770003161b33c  
Session URL: https://web-fea-web.vercel.app/analysis-link/21e14731c9084e0a845770003161b33c

- You can now switch back to [GenFEA Web](#) if no errors are present

# Analysis Workflow

- In GenFEA Web, select 'Refresh' and when ready,
- Select 'Import Results'

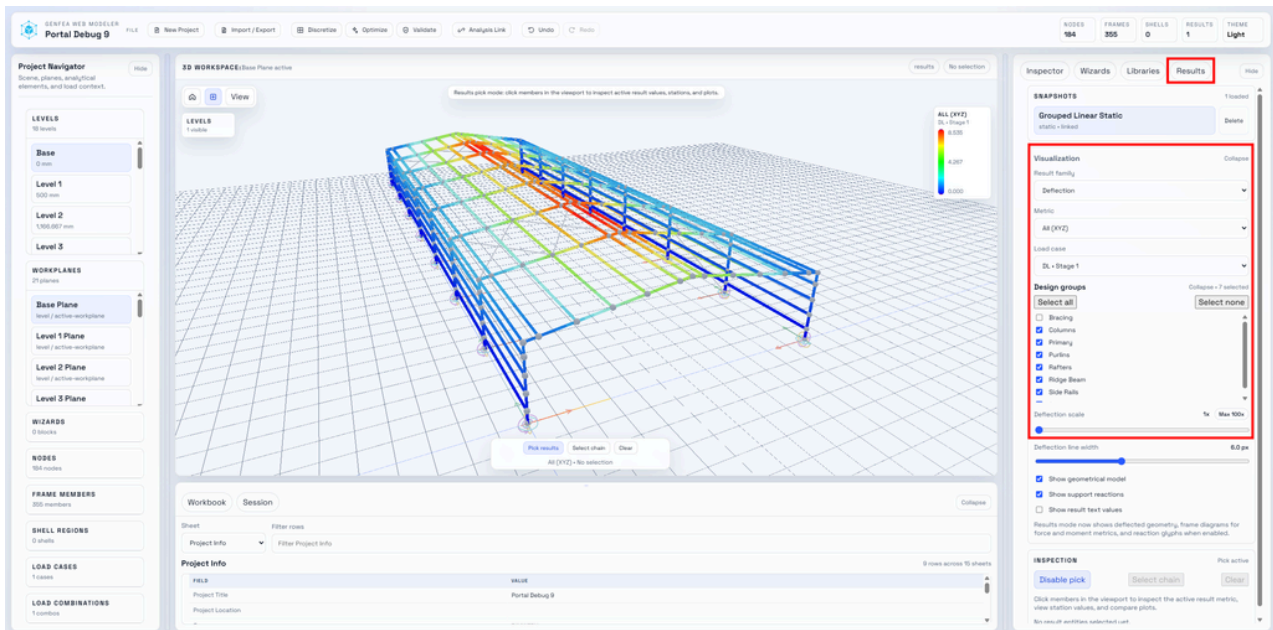


The screenshot shows the 'ANALYSIS LINK' interface in GenFEA Web. The status is 'completed'. The instructions state: 'Freeze the current web model into a tokenized solver session, then paste the generated URL into the GenFEAx desktop app.' The 'Session URL' is displayed as `https://web-fea-web.vercel.app/analysis-link/21e14731c9084e0a845770003161b33c`. Below the URL, there are four summary cards: 'Requests' (1), 'Expires' (5/1/2026, 10:32:24 AM), 'Latest run' (completed), and 'Snapshots' (1). A detailed run entry for 'run-0e86249890904bc9ae2d976c3cf4bc45' is shown, indicating it 'Completed 1 request(s)' on '4/24/2026, 10:36:06 AM'. At the bottom, there are five buttons: 'Copy URL', 'Refresh' (highlighted with a red box), 'Regenerate', 'Import Results' (highlighted with a red box), and 'Close'.

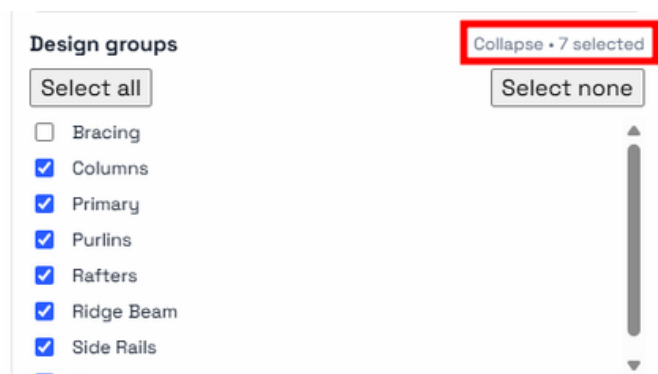
- GenFEA Web will load and display the result snapshot

# Analysis Workflow

- You can now choose analysis results to display using the **Results** panel options
- While in 'Results' mode, you can also select elements and view the **Inspection Plot** output in the **Results** panel

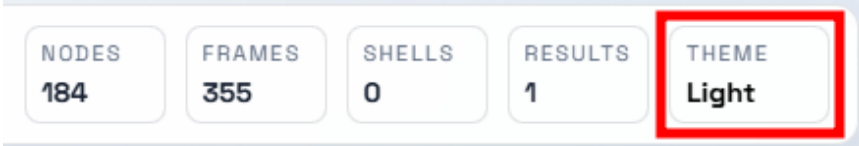


**Note:** Expand the **Design Groups** container to select specific design groups to display



# GenFEA Web Tips

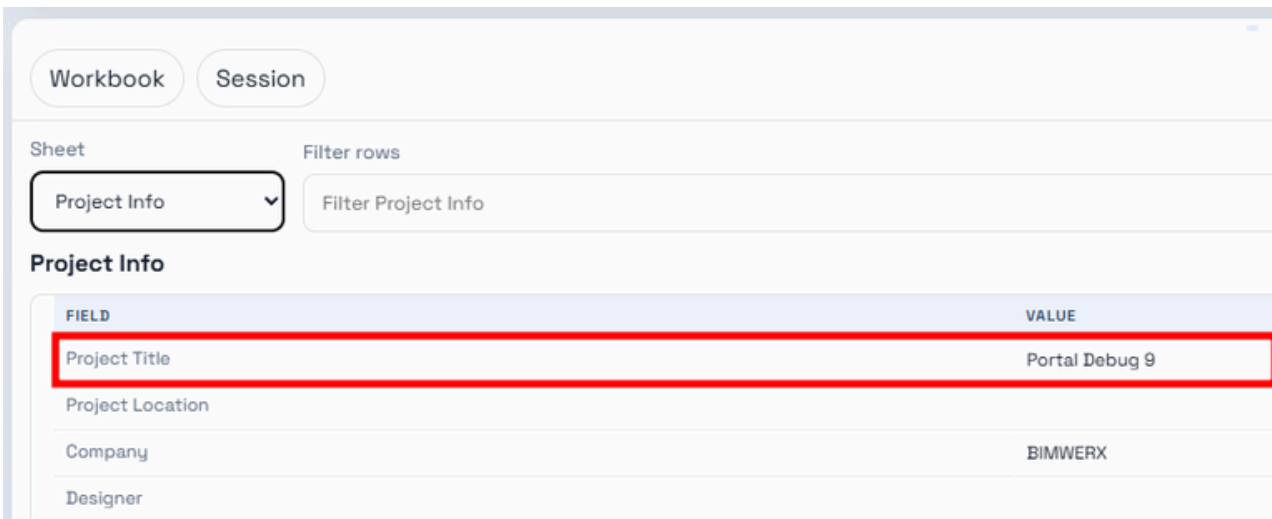
- Adjust [Theme](#) if required:



Dashboard showing project statistics and the current theme:

NODES 184	FRAMES 355	SHELLS 0	RESULTS 1	THEME Light
--------------	---------------	-------------	--------------	----------------

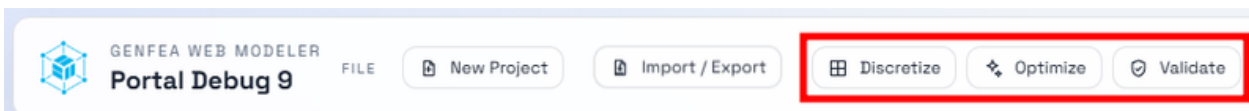
- Set the [Project Title](#) for easier identification prior to analysis workflow:



Project Info table:

FIELD	VALUE
Project Title	Portal Debug 9
Project Location	
Company	BIMWERX
Designer	

- Use the '[Discretize](#)', '[Optimize](#)', and '[Validate](#)' tools prior to running Analysis Link:



Bottom toolbar showing analysis tools:

GENFEA WEB MODELER  
Portal Debug 9

FILE   New Project   Import / Export   **Discretize**   Optimize   Validate



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