


Agrinet Integration: Critical Issues and Next Steps

Status Report June 22

✔ Agrinet Integration Status Summary (as of June 17, 2025) [↗](#)

🔗 SYSTEM COMPONENTS & CONNECTION PATHS [↗](#)

Component	Status	Notes
Wix Frontend ( NTARI.org Network Theory Applied Research Institute)	✔ Online	Live and rendering forms/data
Backend Node (54.211.206.117)	✔ Online	API reachable, PM2 active
Registry Node (18.234.49.114)	⚠ Partially Online	PM2 logs ok, but port binding/debug issues still blocking Federation Sync
MongoDB (both nodes)	✔ Connected	Logs show successful connections
Wix → Backend Integration	✔ Verified	API test calls successful via frontend
Backend → Registry Federation	✖ Not Functional	POST /federation/users fails; registry not listening or route not active
Wix Frontend → Federation Data	✖ Not Functional	Registry not serving real-time federated content yet

🔧 REMAINING TASKS / NEXT STEPS (Simplified) [↗](#)

🔧 1. Fix Registry Node Port Binding [↗](#)


- ✔ `server.listen(PORT, '0.0.0.0', ...)` is correctly set
- ✖ **Port 3000 not bound** – `lsof` shows nothing listening
- ✔ PM2 logs confirm boot
- 🔥 PM2 error log showed duplicate imports, recently fixed
- 🔧 **NEXT:** Confirm app runs *without* PM2 to isolate PM2-related issues:

```
1 bash
```

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```
node server.js
```

🔒 2. Check EC2 Security Group (Registry Node) [🔗](#)

- ☒ Inbound rules must allow TCP on **port 3000**
- ☒ If not allowed, the backend node can't reach registry node
-  **NEXT:** Update Security Group to allow `TCP:3000` from anywhere temporarily:
 - Type: **Custom TCP**
 - Port: `3000`
 - Source: `0.0.0.0/0`

🔄 3. Re-test Federation Sync (from backend node) [🔗](#)

```
1 bash
```

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```
curl -X POST http://18.234.49.114:3000/federation/users \
  -H "x-api-key: secret-key-1234" \
  -H "Content-Type: application/json" \
  -d '{"name":"Test User","email":"test@ntari.org","location":"KY","role":"farmer"}'
```

- ☒ Should return `User federated` or `User already exists`
- ☒ Fails if server not bound, route not defined, or key mismatch

🔧 4. Verify Health Endpoint from Backend [🔗](#)

```
1 bash
```

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```
curl http://18.234.49.114:3000/health
```

- ☒ Confirms if server is live and routes load before `.listen()`

📋 RECOMMENDATIONS [🔗](#)

Area	Fix
PM2 Debugging	Run <code>node server.js</code> manually to isolate crash causes before using <code>pm2</code> again
Logs	Always check both <code>stdout</code> and <code>stderr</code> logs with <code>pm2 logs</code>
CORS	Registry CORS is correctly limited to <code>https://www.ntari.org</code> <input checked="" type="checkbox"/>
Routes Order	Ensure <code>app.use("/federation", federationRoutes)</code> comes before <code>authMiddleware</code>
Crash Recovery	Use <code>pm2 delete all</code> before restarting if stuck in error loop

✓ TL;DR: Are All Critical Integrations Working? [🔗](#)

Integration	Status	Action
Wix → Backend Node (API)	✓	All frontend → backend calls working
Backend Node → Registry Node	✗	Federation sync blocked — fix Registry binding
Registry Federation Services	✗	Port 3000 unreachable — binding or firewall issue