# Quick Start Guide: Tenable Integration Testing

## 🚀 Test Your Complete Tenable Integration

Yes! With this setup you can absolutely test asset/vulnerability imports and scheduled tasks locally. Here’s how:

### Step 1: Start Mock Tenable Server

# Terminal 1: Start the mock server  
python mock\_tenable\_server.py

You’ll see:

Starting Mock Tenable Server...  
Access at: http://localhost:5001  
Available endpoints:  
 GET /session  
 GET /scans  
 GET /assets  
 POST /assets/export  
 GET /workbenches/vulnerabilities  
 POST /vulns/export

### Step 2: Test Integration Components

# Terminal 2: Test the full integration  
npx tsx test\_full\_integration.ts

This will test: - ✅ Connection to mock server - ✅ Asset synchronization (100 mock assets) - ✅ Vulnerability synchronization (500+ mock vulnerabilities) - ✅ Full sync process with data transformation - ✅ Scheduled task configuration - ✅ Manual job execution

### Step 3: Test via API Endpoints

With RAS-DASH running, you can test via HTTP:

# Test connection  
curl http://localhost:5000/api/tenable/test-connection  
  
# Manual asset sync  
curl -X POST http://localhost:5000/api/tenable/sync/assets  
  
# Manual vulnerability sync   
curl -X POST http://localhost:5000/api/tenable/sync/vulnerabilities  
  
# Full sync  
curl -X POST http://localhost:5000/api/tenable/sync/full  
  
# Check scheduler status  
curl http://localhost:5000/api/tenable/scheduler/status  
  
# Run scheduled job manually  
curl -X POST http://localhost:5000/api/tenable/scheduler/jobs/tenable-health-check/run

## 🔄 What Gets Tested

### Asset Import & Transformation

* **Mock Data**: 100 realistic assets with Windows/Linux OS, cloud metadata, exposure scores
* **Import Process**: Export API → Chunked download → Data transformation
* **RAS-DASH Format**: Converts Tenable format to your existing asset schema

### Vulnerability Import & Transformation

* **Mock Data**: 500+ vulnerabilities with CVSS scores, severity levels, plugin data
* **Import Process**: Vulnerability export → Chunked download → Risk analysis
* **RAS-DASH Format**: Maps to your vulnerability management system

### Scheduled Task Testing

* **Health Check**: Every 30 minutes (runs immediately for testing)
* **Delta Sync**: Every 1 hour (configurable via env)
* **Full Sync**: Every 4 hours (configurable via env)
* **Manual Execution**: Test any job on-demand

## 📊 Expected Output

### Asset Sync Results

✅ Asset sync completed: 100 assets  
Transforming 100 Tenable assets to RAS-DASH format  
Transformed asset: server-1.example.com (192.168.1.10)  
Transformed asset: server-2.example.com (192.168.1.11)  
...  
Asset transformation completed

### Vulnerability Sync Results

✅ Vulnerability sync completed: 500 vulnerabilities   
Transforming 500 Tenable vulnerabilities to RAS-DASH format  
Transformed vulnerability: Sample Vulnerability 1 on server-1.example.com  
...  
Vulnerability transformation completed

### Scheduler Status

✅ Scheduler status:  
 - Initialized: true  
 - Total jobs: 3  
 - Active jobs: 3  
  
Scheduled jobs:  
 - Tenable Delta Sync: enabled (0 \*/1 \* \* \*)  
 - Tenable Full Sync: enabled (0 2 \*/1 \* \*)   
 - Tenable Health Check: enabled (\*/30 \* \* \*)

## 🔧 Configuration Options

### Environment Variables (Already Set)

TENABLE\_BASE\_URL=http://localhost:5001 # Mock server  
TENABLE\_SYNC\_ENABLED=true # Enable scheduling  
TENABLE\_SYNC\_INTERVAL\_HOURS=1 # Delta sync every hour  
TENABLE\_ASSET\_CHUNK\_SIZE=50 # Smaller chunks for testing

### Switch to Production

When you get Tenable cloud access, just change:

TENABLE\_BASE\_URL=https://cloud.tenable.com  
TENABLE\_ACCESS\_KEY=your\_real\_access\_key  
TENABLE\_SECRET\_KEY=your\_real\_secret\_key

## 🎯 Integration Benefits

1. **Complete Local Testing**: No cloud dependencies required
2. **Realistic Data**: Mock data matches real Tenable API structure
3. **Scheduled Automation**: Test cron jobs and background synchronization
4. **Data Transformation**: Verify Tenable → RAS-DASH data mapping
5. **Error Handling**: Test connection failures and retry logic
6. **Performance Testing**: Measure sync times and throughput

## 🚨 Troubleshooting

### Mock Server Not Running

❌ Connection test failed - check if mock server is running

**Solution**: Start python mock\_tenable\_server.py first

### Integration Service Errors

❌ Tenable Integration initialized with base URL: http://localhost:5001

**Solution**: Check that RAS-DASH server is running and environment variables are loaded

### Scheduler Not Starting

**Solution**: Verify TENABLE\_SYNC\_ENABLED=true in .env file

## ✅ Success Indicators

You’ll know everything is working when you see: - ✅ 100 assets imported and transformed - ✅ 500+ vulnerabilities imported and transformed  
- ✅ 3 scheduled jobs running (delta sync, full sync, health check) - ✅ Manual job execution working - ✅ Data in RAS-DASH format with proper field mapping

This gives you a complete testing environment for the Tenable integration without requiring any cloud access!