

NovaRax Tenant Manager Plugin - Complete File Structure

Installation Path

```
/var/www/app.novarax.ae/wp-content/mu-plugins/novarax-tenant-manager/
```

Complete Directory Tree

```
novarax-tenant-manager/
|
|— novarax-tenant-manager.php      # Main plugin file (already created)
|— readme.txt                     # Plugin documentation
|— LICENSE                        # License file
|— .gitignore                     # Git ignore file
|
|— includes/                      # Core functionality
|   |— class-database-manager.php  # Database operations (already created)
|   |— class-tenant-operations.php # Tenant CRUD operations (already created)
|   |— class-tenant-validator.php  # Input validation
|   |— class-subdomain-manager.php # Subdomain handling
|   |— class-provisioning-queue.php # Asynchronous provisioning
|   |— class-logger.php            # Logging system
|   |— class-email-notifications.php # Email templates and sending
|   |— class-security.php          # Security utilities
|   |
|   |— api/                       # REST API
|       |— class-api-handler.php   # Main API handler
|       |— class-api-authentication.php # API authentication
|       |— class-api-endpoints.php # API endpoint definitions
|       |
|   |— integrations/              # Third-party integrations
|       |— class-woocommerce-integration.php # WooCommerce hooks
|       |— class-subscription-handler.php # Subscription management
|       |
|— admin/                         # Admin interface
|   |— class-admin-interface.php   # Main admin menu and pages
|   |— class-tenant-list-table.php # Tenant list table (WP_List_Table)
|   |— class-admin-ajax.php        # AJAX handlers
|   |— class-settings.php          # Settings page
|   |— class-bulk-actions.php      # Bulk operations
|   |
```

```

| | └─ views/                # Admin view templates
| |   └─ dashboard.php      # Main dashboard
| |   └─ tenant-list.php    # Tenants list page
| |   └─ tenant-add.php     # Add new tenant form
| |   └─ tenant-edit.php    # Edit tenant form
| |   └─ tenant-view.php    # Single tenant details
| |   └─ settings.php       # Settings page
| |   └─ analytics.php      # Analytics dashboard
| |   └─ partials/         # Reusable partials
| |     └─ header.php
| |     └─ footer.php
| |     └─ tenant-stats-widget.php
| |     └─ recent-activity.php
| |
| └─ meta-boxes/           # Admin meta boxes
|   └─ class-tenant-info-metabox.php
|   └─ class-subscription-metabox.php
|   └─ class-usage-metabox.php
|
└─ assets/                # Static assets
  └─ css/
    └─ admin.css           # Admin styles
    └─ admin.min.css       # Minified admin styles
    └─ admin-rtl.css       # RTL support
  └─ js/
    └─ admin.js            # Admin JavaScript
    └─ admin.min.js        # Minified admin JavaScript
    └─ tenant-form.js      # Tenant form validation
    └─ charts.js           # Analytics charts
  └─ images/
    └─ logo.png
    └─ icon-tenant.svg
    └─ placeholder-avatar.png
  └─ languages/           # Translations
    └─ novarax-tenant-manager.pot # Translation template
    └─ novarax-tenant-manager-ar.po # Arabic translation
    └─ novarax-tenant-manager-ar.mo # Compiled Arabic
  └─ tests/              # Unit tests (PHPUnit)
    └─ bootstrap.php
    └─ test-database-manager.php

```

```
| |— test-tenant-operations.php
| |— test-api-endpoints.php
|
|— docs/                # Documentation
   |— api-reference.md
   |— hooks-filters.md
   |— developer-guide.md
   |— troubleshooting.md
```

Files Created So Far

- ✅ **novarax-tenant-manager.php** - Main plugin file with initialization
 - ✅ **includes/class-database-manager.php** - Complete database management
 - ✅ **includes/class-tenant-operations.php** - Full tenant CRUD operations
-

Next Files to Create (Priority Order)

Phase 1: Core Functionality (Week 1)

- includes/class-tenant-validator.php**
 - Validate usernames, emails, subdomains
 - Check for duplicates
 - Sanitize inputs
- includes/class-logger.php**
 - Log to database and files
 - Different log levels (info, warning, error)
 - Log rotation
- includes/class-security.php**
 - Encryption/decryption methods
 - IP detection
 - Nonce validation
 - SQL injection prevention
- includes/class-email-notifications.php**
 - Welcome email template

- Activation email template
- Suspension/cancellation emails
- Invoice emails

5. includes/class-subdomain-manager.php

- Validate subdomain availability
- Generate unique subdomains
- Handle subdomain conflicts

6. includes/class-provisioning-queue.php

- Queue system for async provisioning
 - Process queue in background
 - Handle failures and retries
-

Phase 2: Admin Interface (Week 2)

7. admin/class-admin-interface.php

- Register admin menus
- Enqueue scripts/styles
- Load admin pages

8. admin/class-tenant-list-table.php

- Extend WP_List_Table
- Display tenants in table format
- Sortable columns
- Bulk actions

9. admin/views/tenant-list.php

- Tenant list page HTML
- Search and filters
- Pagination

10. admin/views/tenant-add.php

- Add new tenant form
- Field validation

- Submit handler

11. **admin/views/tenant-edit.php**

- Edit tenant form
- Pre-populate fields
- Update handler

12. **admin/views/tenant-view.php**

- Single tenant dashboard
- Display all tenant info
- Quick actions

13. **admin/views/dashboard.php**

- Admin dashboard widgets
- Statistics and charts
- Recent activity

14. **admin/class-admin-ajax.php**

- AJAX handlers for admin
- Check username availability
- Quick actions (suspend, activate)

Phase 3: WooCommerce Integration (Week 3)

15. **includes/integrations/class-woocommerce-integration.php**

- Hook into WooCommerce events
- Order completed hook
- Subscription status changes
- Product-to-module mapping

16. **includes/integrations/class-subscription-handler.php**

- Monitor subscription status
- Handle renewals
- Handle cancellations

- Grace period management
-

Phase 4: REST API (Week 4)

17. includes/api/class-api-handler.php

- Register REST routes
- Handle requests
- Format responses

18. includes/api/class-api-authentication.php

- API key validation
- JWT token validation
- Rate limiting

19. includes/api/class-api-endpoints.php

- Define all endpoints
 - `/validate-session`
 - `/check-license`
 - `/tenant-info`
-

Phase 5: Settings & Configuration (Week 4)

20. admin/class-settings.php

- Settings page
- Options registration
- Settings validation

21. admin/views/settings.php

- Settings form HTML
 - Tabbed interface
 - Save settings
-

Helper/Utility Classes

These can be created as needed:

- **includes/class-installer.php** - Handle plugin installation/upgrade
 - **includes/class-uninstaller.php** - Clean uninstall process
 - **includes/class-cron-jobs.php** - Scheduled tasks
 - **includes/class-cache-manager.php** - Cache management
 - **admin/class-notices.php** - Admin notices system
 - **admin/class-help-tabs.php** - Context help tabs
-

Asset Files

CSS Files to Create:

assets/css/admin.css

```
css

/* Admin dashboard styles */
.novarax-dashboard {}
.novarax-tenant-card {}
.novarax-stats-widget {}
/* etc. */
```

JavaScript Files to Create:

assets/js/admin.js

```
javascript

// Admin functionality
// AJAX calls
// Form validation
// Charts
```

assets/js/tenant-form.js

```
javascript
```

```
// Real-time username availability check
```

```
// Form validation
```

```
// Auto-generate subdomain preview
```

Testing Files

tests/bootstrap.php

```
php
```

```
// PHPUnit bootstrap file
```

```
// Load WordPress test environment
```

tests/test-database-manager.php

```
php
```

```
// Test database operations
```

```
// Test table creation
```

```
// Test database provisioning
```

Important Configuration Notes

Required wp-config.php Additions

Add to `/var/www/app.novarax.ae/wp-config.php`:

```
php
```

```
/**
 * NovaRax Tenant Manager Configuration
 */

// Database root credentials for creating tenant databases
define('DB_ROOT_USER', 'root');
define('DB_ROOT_PASSWORD', 'your_root_password');

// Tenant configuration
define('NOVARAX_TENANT_CODEBASE_PATH', '/var/www/tenant-dashboard');
define('NOVARAX_SUBDOMAIN_SUFFIX', '.app.novarax.ae');

// Encryption key (generate unique key)
define('NOVARAX_ENCRYPTION_KEY', 'your-unique-32-character-key-here');

// API configuration
define('NOVARAX_API_ENABLED', true);
define('NOVARAX_API_RATE_LIMIT', 1000); // Requests per hour
```

Development Workflow

Step 1: Create Core Files

```
bash

cd /var/www/app.novarax.ae/wp-content/mu-plugins/
mkdir -p novarax-tenant-manager
cd novarax-tenant-manager

# Create main directories
mkdir -p includes/{api,integrations}
mkdir -p admin/{views/{partials},meta-boxes}
mkdir -p assets/{css,js,images}
mkdir -p languages
mkdir -p tests
mkdir -p docs
```

Step 2: Copy Files

Copy the created PHP files to their respective locations.

Step 3: Set Permissions

```
bash
```

```
chmod 755 -R /var/www/app.novarax.ac/wp-content/mu-plugins/novarax-tenant-manager/  
chmod 644 /var/www/app.novarax.ac/wp-content/mu-plugins/novarax-tenant-manager/*.php
```

Step 4: Activate

MU-plugins are automatically active. Just refresh WordPress admin.

Git Repository Structure

```
.git/  
.gitignore  
README.md  
CHANGELOG.md  
composer.json    # For dependencies  
package.json     # For npm scripts  
webpack.config.js # For asset compilation  
phpunit.xml      # PHPUnit configuration
```

.gitignore Contents:

```
# WordPress  
/wordpress/  
/wp-content/*  
!/wp-content/mu-plugins/  
  
# Dependencies  
/node_modules/  
/vendor/  
  
# Build files  
/assets/css/*.min.css  
/assets/js/*.min.js  
  
# Environment  
.env  
/backups/  
  
# IDE
```

```
.vscode/  
.idea/  
*.sublime-*  
  
# OS  
.DS_Store  
Thumbs.db  
  
# Logs  
*.log  
/logs/
```

Next Steps

1. **Create remaining core classes** (Validator, Logger, Security)
2. **Build admin interface** (Menu, list table, forms)
3. **Implement WooCommerce integration**
4. **Create REST API endpoints**
5. **Add email templates**
6. **Write tests**
7. **Create documentation**

Let me know which files you want me to create next!