

# **Settings & Configuration Module**

User Manual - Console Interface

**SONARWORKS WORKFLOW SYSTEM**

Version 1.1

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## 1. Introduction

The Settings & Configuration module allows administrators to customize system behavior, configure email services, set security policies, and manage various application preferences.

### Configurable Areas:

- System-wide settings
- Email server configuration (12+ protocols supported)
- Workflow behavior settings
- Security and authentication settings
- Notification preferences
- User interface customization
- Theme and dark mode settings
- Import/Export functionality

**WARNING:** Settings changes may affect all users. Review changes carefully before saving.

*[Screenshot: Settings Module Overview]*

*Figure: Settings Module Overview*

## 2. Accessing Settings

### Steps:

**Step 1:** Log in with administrator credentials

**Step 2:** Click 'Administration' in the navigation sidebar

**Step 3:** Click 'Settings' from the sub-menu

**Step 4:** The Settings page displays with tabs or sections

*[Screenshot: Navigation to Settings]*

*Figure: Navigation to Settings*

### 2.1 Settings Tabs

Settings are organized into the following tabs:

Tab	Description
General	Basic system settings, name, description
Appearance	Logo, favicon, branding
Theme	Colors, dark mode, UI customization

Security	Password policies, session settings
Email	Email server configuration
Notifications	Email notification settings
Workflow	Default workflow behaviors
Approval	Approval configuration defaults
Reporting	Report settings and access

## 3. System Settings

### 3.1 General Settings

Setting	Type	Description
System Name	String	Display name of the application
System Logo	File	Logo displayed in header
Time Zone	Select	Default system time zone
Date Format	Select	Format for displaying dates
Language	Select	Default system language
Currency	Select	Default currency for financial fields

### 3.2 Changing System Settings

Steps:

**Step 1:** Navigate to the Settings page

**Step 2:** Locate the setting you want to change

**Step 3:** Enter the new value

**Step 4:** Click 'Save' or 'Apply' button

**Step 5:** Settings take effect immediately (some may require refresh)

[Screenshot: System Settings Panel]

Figure: System Settings Panel

### 3.3 Session Settings

Setting	Default	Description
Session Timeout	30 minutes	Idle time before automatic logout
Remember Me Duration	7 days	Extended session when 'Remember Me' checked
Concurrent Sessions	Allowed	Whether user can have multiple active sessions

## 4. Email Configuration

Email configuration is essential for system notifications, approval alerts, and password reset functionality. The system supports 12+ email protocols.

### 4.1 Supported Email Protocols

Protocol	Description	Use Case
SMTP	Generic SMTP server	Any standard mail server
SMTP_GMAIL	Gmail SMTP	Gmail accounts
SMTP_OUTLOOK	Outlook.com SMTP	Personal Outlook accounts
SMTP_OFFICE365	Office 365 SMTP	Microsoft 365 business
SMTP_YAHOO	Yahoo SMTP	Yahoo mail accounts
SMTP_EXCHANGE	Exchange Server SMTP	On-premise Exchange
MICROSOFT_GRAPH	Microsoft Graph API	Modern Microsoft 365
GMAIL_API	Gmail API	Google Workspace
EXCHANGE_EWS	Exchange Web Services	Legacy Exchange
SENDGRID	SendGrid API	Transactional email
MAILGUN	Mailgun API	Bulk email service
AWS_SES	Amazon Simple Email Service	AWS infrastructure

### 4.2 Common SMTP Settings

Setting	Required	Description	Example
SMTP Host	Yes	Mail server hostname	smtp.company.com
SMTP Port	Yes	Mail server port	587
Security	Yes	TLS, SSL, or None	TLS
Username	Yes	Authentication username	workflow@company.com
Password	Yes	Authentication password	*****
Sender Email	Yes	From email address	noreply@company.com
Sender Name	Yes	From display name	Workflow System
Reply-To	No	Reply-to address	support@company.com

[Screenshot: Email Configuration Form]

Figure: Email Configuration Form

### 4.3 Configuring Email

Steps:

**Step 1:** Navigate to Settings > Email tab

**Step 2:** Select your email protocol from the dropdown

**Step 3:** Enter protocol-specific configuration

**Step 4:** Enter sender email and name

**Step 5:** Click 'Save' to store configuration

**Step 6:** Click 'Test Email' to verify settings

## 4.4 Testing Email Configuration

Steps:

**Step 1:** After saving email settings, click 'Test Email' button

**Step 2:** Enter a test recipient email address

**Step 3:** Click 'Send Test'

**Step 4:** Check the recipient inbox for the test email

**Step 5:** Verify the email arrived and looks correct

**TIP:** If test email fails, check SMTP settings, firewall rules, and authentication credentials.

## 5. Email Protocol Configuration

### 5.1 Standard SMTP Configuration

For generic SMTP, Gmail, Outlook, Yahoo, or Office 365:

Provider	SMTP Host	Port	Security
Microsoft 365	smtp.office365.com	587	TLS
Gmail	smtp.gmail.com	587	TLS
Outlook.com	smtp-mail.outlook.com	587	TLS
Yahoo	smtp.mail.yahoo.com	587	TLS
Exchange On-Premise	mail.yourcompany.com	587	TLS
Custom Server	smtp.yourserver.com	25/587/465	Varies

### 5.2 Microsoft Graph API Configuration

For modern Microsoft 365 integration using Microsoft Graph:

Setting	Description	How to Obtain
Tenant ID	Azure AD tenant identifier	Azure Portal > Azure Active Directory
Client ID	Application (client) ID	Azure Portal > App registrations
Client Secret	Client secret value	Azure Portal > App registrations > Certificates & secrets

User Email	Microsoft 365 mailbox	The sending user's email address
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#### Setup Steps:

**Step 1:** Register an application in Azure Portal

**Step 2:** Grant Mail.Send permission (Application type)

**Step 3:** Create a client secret

**Step 4:** Copy Tenant ID, Client ID, and Client Secret

**Step 5:** Enter these values in Settings > Email

**Step 6:** Enter the sender mailbox email

**Step 7:** Test the configuration

### 5.3 Gmail API Configuration

For Google Workspace using Gmail API:

Setting	Description	How to Obtain
Client ID	OAuth2 client ID	Google Cloud Console > APIs & Credentials
Client Secret	OAuth2 client secret	Google Cloud Console > APIs & Credentials
Refresh Token	OAuth2 refresh token	OAuth2 playground or application flow
User Email	Gmail address	The sending Gmail address

### 5.4 Exchange EWS Configuration

For legacy Exchange Server using Exchange Web Services:

Setting	Description
Server URL	EWS endpoint (e.g., <a href="https://mail.company.com/EWS/Exchange.asmx">https://mail.company.com/EWS/Exchange.asmx</a> )
Username	Domain\Username or email
Password	Exchange password
Domain	Active Directory domain (optional)
Email Address	Exchange mailbox email

### 5.5 SendGrid Configuration

For SendGrid transactional email service:

Setting	Description
API Key	SendGrid API key (starts with SG.)
Sender Email	Verified sender email in SendGrid

## 5.6 Mailgun Configuration

For Mailgun email service:

Setting	Description
API Key	Mailgun API key
Domain	Mailgun sending domain
Sender Email	Sender email address

## 5.7 AWS SES Configuration

For Amazon Simple Email Service:

Setting	Description
AWS Region	SES region (e.g., us-east-1)
Access Key ID	AWS IAM access key
Secret Access Key	AWS IAM secret key
Sender Email	Verified sender email in SES

# 6. Workflow Settings

## 6.1 Default Workflow Behaviors

Setting	Default	Description
Require Approvers	Yes	Workflows must have at least one approver
Allow Draft Save	Yes	Users can save incomplete submissions
Allow Recall	Yes	Initiators can recall pending workflows
Allow Cancel	Yes	Initiators can cancel their workflows
Require Approval Comment	No	Force comments when approving
Require Rejection Comment	Yes	Force comments when rejecting
Auto-Generate Reference	Yes	System generates reference numbers
Skip Unauthorized Approvers	No	Auto-escalate when amount exceeds limit

## 6.2 Reference Number Format

Configure how workflow reference numbers are generated:

Component	Token	Example
Prefix	WF	WF-

Year	{YYYY}	2024
Month	{MM}	01
Sequential	{SEQ}	00001
Workflow Code	{CODE}	PR

#### Example: Reference Number Format

Format: WF-{YYYY}-{SEQ}

Result: WF-2024-00001, WF-2024-00002, ...

Format: {CODE}/{YYYY}/{MM}/{SEQ}

Result: PR/2024/01/00001, PR/2024/01/00002, ...

## 6.3 Escalation Settings

Setting	Default	Description
Default Escalation Days	3 days	Time before auto-escalation
Send Escalation Email	Yes	Notify when workflow escalates
Send Reminder Email	Yes	Send reminders before escalation

## 7. Security Settings

### 7.1 Password Policy

Setting	Default	Description
Minimum Length	8 characters	Minimum password length
Require Uppercase	Yes	Must include uppercase letter
Require Lowercase	Yes	Must include lowercase letter
Require Number	Yes	Must include digit
Require Special Char	No	Must include special character
Password Expiry	90 days	Days before password must change
Password History	3	Number of previous passwords prevented

### 7.2 Account Lockout Policy

Setting	Default	Description
Max Failed Attempts	5	Failed logins before lockout
Lockout Duration	30 minutes	Auto-unlock after this time
Reset Counter After	30 minutes	Clear failed count after success

## 7.3 Session Security

Setting	Default	Description
Token Expiry	8 hours	JWT token validity period
Secure Cookies	Yes	Use secure flag for cookies
SameSite Policy	Strict	Cookie same-site policy

## 8. Notification Settings

### 8.1 Email Notification Types

Notification	Default	Recipients
Workflow Submitted	Yes	First level approver
Workflow Approved	Yes	Initiator, next approver
Workflow Rejected	Yes	Initiator
Workflow Escalated	Yes	Escalation target, initiator
Workflow Recalled	Yes	Previous approver
Password Reset	Yes	User requesting reset
Account Locked	Yes	User, admin

### 8.2 Enabling/Disabling Notifications

Steps:

**Step 1:** Navigate to Settings > Notifications

**Step 2:** Find the notification type

**Step 3:** Toggle the switch to enable/disable

**Step 4:** Click 'Save' to apply changes

### 8.3 Email Approval Links

Configure whether approval emails include direct action links:

Setting	Description
Include Approve Link	Email contains direct approve button/link
Include Reject Link	Email contains direct reject button/link
Include Escalate Link	Email contains direct escalate button/link
Link Expiry	How long email links remain valid (default 7 days)
Include Submission Title	Show submission title in email subject

## 9. UI Customization

### 9.1 Branding Settings

Setting	Description
Application Name	Name shown in browser tab and header
Logo	Application logo (recommended: 200x50px)
Favicon	Browser tab icon (16x16 or 32x32 ICO/PNG)
Primary Color	Main theme color
Secondary Color	Accent color for highlights

### 9.2 Logo Configuration

Steps:

**Step 1:** Navigate to Settings > Appearance tab

**Step 2:** Click 'Upload Logo' button

**Step 3:** Select an image file (PNG, JPG recommended)

**Step 4:** Preview the logo in the header

**Step 5:** Click 'Save' to apply

### 9.3 Dashboard Customization

- Configure which widgets appear on the dashboard
- Set default number of items in lists
- Configure quick action buttons
- Set default landing page after login

## 10. Theme Settings

The Theme Settings tab provides comprehensive control over the application's visual appearance. Changes apply immediately after saving.

### 10.1 Theme Color Options

Setting	Type	Description
Dark Theme	Toggle	Enable dark mode with dark backgrounds and light text
Primary Color	Color	Main brand color used throughout the application
Secondary Color	Color	Accent color for highlights and secondary elements
Sidebar Background	Color	Background color of the navigation sidebar
Sidebar Text	Color	Text color in the navigation sidebar

Header Background	Color	Background color of the top header bar
Header Text	Color	Text color in the header
Body Background	Color	Main content area background color
Card Background	Color	Background color for cards and panels
Button Primary	Color	Primary action button color
Success Color	Color	Color for success indicators
Warning Color	Color	Color for warning indicators
Error Color	Color	Color for error indicators

## 10.2 Dark Mode

Dark Mode provides a darker color scheme that reduces eye strain in low-light environments and can save battery on OLED displays.

**Steps:**

**Step 1:** Navigate to Settings > Theme Settings tab

**Step 2:** Toggle 'Dark Theme' to ON

**Step 3:** Click 'Save Changes'

**Step 4:** The interface immediately switches to dark mode

**Step 5:** All components including forms, dialogs, and menus respect dark mode

## 10.3 Dark Mode Features

- Applies to all pages including workflow builder and forms
- Dialog boxes and modals use dark backgrounds
- Form fields have appropriate dark styling
- Tables and lists have dark backgrounds
- Settings persist across sessions
- Works with custom color schemes

**NOTE:** Dark mode settings are stored per-user in local storage for faster loading on return visits.

## 10.4 Applying Theme Changes

**Steps:**

**Step 1:** Navigate to Settings > Theme tab

**Step 2:** Adjust colors using color pickers

**Step 3:** Preview changes in real-time (some elements)

**Step 4:** Click 'Save Changes' to apply

**Step 5:** Refresh the browser if some elements don't update immediately

## 11. Import/Export

### 11.1 Export Settings

Export system configuration as JSON for backup or migration:

Steps:

**Step 1:** Navigate to Settings > Export

**Step 2:** Select items to export

**Step 3:** Click 'Export Settings'

**Step 4:** Save the JSON file

### 11.2 Import Settings

Steps:

**Step 1:** Navigate to Settings > Import

**Step 2:** Click 'Choose File' and select JSON

**Step 3:** Review the import preview

**Step 4:** Click 'Import' to apply

**Step 5:** Verify settings after import

### 11.3 Excel Import/Export

Import and export data using Excel templates:

Entity	Export	Import
Users	Yes	Yes
Roles	Yes	Yes
Corporates	Yes	Yes
SBUs	Yes	Yes
Branches	Yes	Yes
Departments	Yes	Yes
Categories	Yes	Yes

Using Excel Import/Export:

**Step 1:** Navigate to Administration > Import/Export

**Step 2:** Select the entity type

**Step 3:** For import: Download template, fill data, upload

**Step 4:** For export: Click export and save Excel file

## 12. Best Practices

### 12.1 Before Changing Settings

1. Document current settings before changes
2. Test changes in non-production environment first
3. Notify users of significant changes
4. Schedule changes during low-usage periods
5. Have a rollback plan ready

### 12.2 Email Configuration Tips

- Always test email after configuration changes
- Use dedicated email account for system notifications
- Monitor email delivery rates
- Set up SPF/DKIM records for deliverability
- Consider email rate limits
- Use API-based providers (SendGrid, Mailgun) for high volume

### 12.3 Security Recommendations

- Use strong password policies
- Enable account lockout protection
- Review security settings quarterly
- Monitor failed login attempts
- Keep session timeouts reasonable

### 12.4 Troubleshooting Settings Issues

Issue	Solution
Settings not saving	Check permissions, refresh page, clear cache
Email not sending	Verify protocol settings, test connection, check credentials
Users locked out unexpectedly	Review lockout policy, check for brute force attacks
Theme not applying	Clear browser cache, check user preference override
Dark mode not working	Ensure theme settings saved, refresh page
Email test fails	Check firewall, verify credentials, try different protocol