# Runtime System Monitor Reference

Monitor runtime health and resources.



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Runtime System Monitor (Reference):

Displays runtime status and system information when Designer is connected to a running solution, whether local or remote.

**Access:** Runtime  System Monitor

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## Monitor Access Methods

### Designer Access

Navigate to Runtime  System Monitor when connected to runtime.

### Browser Access

No installation required:

`http://ServerIP:Port/html5/?Monitor=Runtime`

**Examples:**

- Local: `http://localhost:3101/html5/?Monitor=Runtime`
- Remote: `http://192.168.1.100:3201/html5/?Monitor=Runtime`

Port defaults: 3101 (Production), 3201 (Development)

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## System Information Properties

### Profile and Licensing

| Property | Description | Example |
|---|---|---|
| **Info.ProfileName** | Current execution profile | Production |
| **Info.EvaluationMode** | Running in evaluation | True/False |
| **Info.EvaluationTimeRemaining** | Time left in evaluation | 02:45:30 |
| **Info.License.SerialNumber** | License serial | ABC-123-456 |
| **Info.License.LicensedProduct** | Product/Family/Model | FrameworX-5000 |

### Product Information

| Property | Description |
|---|---|
| **Info.Product.Company** | Product company name |
| **Info.Product.Name** | Product name |
| **Info.Product.Version** | Product version in use |

### Solution Details

| Property | Description |
|---|---|
| **Info.Solution.CurrentBuild** | Build number |

| | |
|---|---|
| **Info.Solution.DateModified** | Last modification |
| **Info.Solution.ProductVersion** | Product used for editing |
| **Info.Solution.RequiredLicense** | Production license needed |
| **Info.Solution.TargetFramework** | Platform requirement |
| **Info.Solution.VersionID** | Configuration version |

### Server Information

| Property | Description |
|---|---|
| **Server.ComputerName** | Server hostname |
| **Server.DateString** | Current server time |
| **Server.OSVersion** | Operating system |
| **Server.TStartupStartedTime** | Solution start time |
| **Server.SystemMonitor.Uptime** | Running duration |

### Runtime Status

| Property | Description |
|---|---|
| **Server.IsRunningAsService** | Windows service mode |
| **Server.IsRunningOnDocker** | Docker container mode |
| **Server.NumberOfTagsLoaded** | Tags in memory |

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## License Verification

**Critical checks for production:**

| Check | Requirement | Where to Verify |
|---|---|---|
| **Evaluation Mode** | Must be False | Info.EvaluationMode |
| **License Match** | Solution  License | RequiredLicense vs LicensedProduct |
| **Profile** | Must be Production | Info.ProfileName |

### License Warning Signs

- EvaluationMode = True
- EvaluationTimeRemaining shown
- License mismatch warnings
- Wrong execution profile

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## Using Monitor Data

### Health Checks

Monitor these indicators:

- Uptime for stability
- Tag count for memory usage
- License status for compliance
- Profile for environment

### Troubleshooting

| Symptom | Check | Action |
|---|---|---|
| Solution stops | EvaluationTimeRemaining | Apply license |
| Wrong data | ProfileName | Switch profile |
| Performance issues | NumberOfTagsLoaded | Optimize tags |
| Connection problems | ComputerName | Verify server |

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# Remote Monitoring

## Setup Requirements

1. Solution running on server
2. Port accessible through firewall
3. Network connectivity
4. Browser on monitoring station

## URL Construction

`http://[ServerAddress]:[Port]/html5/?Monitor=Runtime`

**Components:**

- **ServerAddress**: IP or hostname
- **Port**: Runtime port (profile-specific)
- **Path**: Always `/html5/?Monitor=Runtime`

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# Integration Points

The System Monitor data comes from runtime objects:

- **Server** object properties
- **Info** object properties
- Real-time values
- Automatic updates

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# Best Practices

## Regular Monitoring

- Check uptime daily
- Verify license status
- Monitor tag count growth
- Track version changes

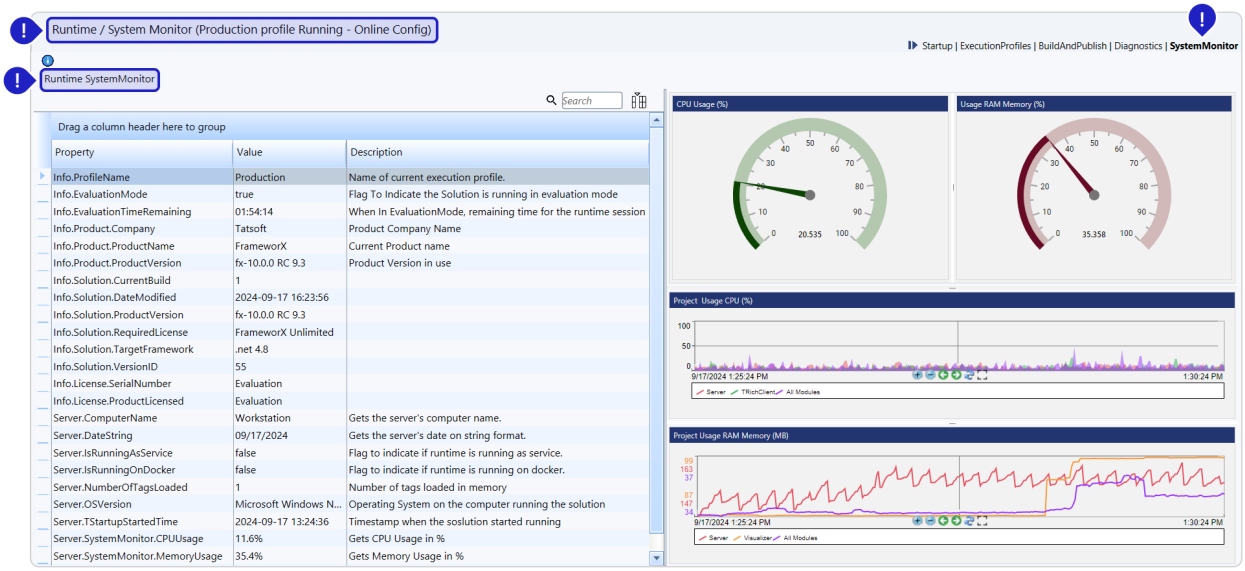
## Production Deployment

- Confirm Production profile
- Verify license compliance
- Document system specs
- Monitor initial hours

## Remote Access

- Secure monitor URLs
- Limit access permissions
- Use HTTPS when possible
- Monitor access logs

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## In this section...