SKF @ptitude Analyst CMSW 7302

Documents features applicable to the Work Notifications Add-On

> User Manual Part No. 32250500-EN Revision A

User Manual

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1 Introduction to SKF @ptitude Analyst CMSW 7302 Work Notifications

Organization of Your Work Notification User Manual

This Work Notification User Manual describes SKF @ptitude Analyst software operating with the Work Notification add-on installed. In these pages you will find information on:

Work Notification administrative setup

Generating and managing Work Notifications

Using the available SAP utility

and other Work Notification features. Since all Work Notification features work in conjunction with standard @ptitude Analyst operations, you should be familiar with @ptitude Analyst and its User Manual before using Work Notification software.

What is Work Notification?

The Work Notification feature allows you to generate work notifications to effectively manage plant maintenance, and provides management tools to edit and approve work notifications, and to create reports of archived work notifications. The Work Notification add-on is fully functional as a stand-alone tool within SKF @ptitude Analyst.

The Work Notification add-on may also be used with the SKF Microlog Inspector / MARLIN to process work notifications initiated on the device. This allows machinery maintenance personnel to walk a ROUTE, and create work notifications immediately as problems are detected or observed. Work notifications can then be uploaded to SKF @ptitude Inspector software, where work notification management tools are available.

Once a work notification has been submitted and approved, you may create a work notification report using the @ptitude Analyst software.

In addition, for those clients who use an SAP CMMS system, an available SAP interface add-on allows you to automatically submit work notifications to the SAP CMMS using the SKF @ptitude Analyst Monitor application.

The SAP interface add-on is an optional component purchased separately.

Work Notification Software Overview

The Work Notification software is the term used to describe @ptitude Analyst with the work notification add-on installed.

The Work Notification software and Microlog Inspector / MARLIN devices are used to generate work notifications for machinery problems. In the Work Notification software, work notifications are generated, managed, reviewed, submitted, and archived.

For those clients with the SAP interface add-on, SKF @ptitude Analyst Monitor processes submitted work notifications, and connects to the compatible CMMS (Computerized Maintenance Management Software) system, such as SAP, if available.

To run Work Notification:

- Double-click the SKF @ptitude Analyst icon.
- After double-clicking the SKF @ptitude Analyst icon, log in to @ptitude Analyst. @ptitude Analyst menus provide features used with the Work Notification feature for generating and managing work notification entries.
- @ptitude Analyst menu options allow you to perform the following Work Notification features:
- Perform initial administrative setup, including specifying access rights, and use SKF @ptitude Analyst Monitor to determine the functional location identifier, to specify preferences, etc.
 - For details regarding functional location, reference the Assigning the Functional Location section in this user manual.
- Input work notification settings, including, priority codes, problem descriptions, corrective actions, and work types.
- Generate, edit, and manage work notifications.

The **Tools** menu contains work notification specific options.

Tools

Work Notification Settings... Work Notification Manager... New Work Notification...

Figure 1 - 1. Work Notification **Tools** Menu.

2 Administrative Setup

This chapter provides an overview of the various initial settings available to customize the work notification feature to best accommodate your plant. The most critical setup options include the functional name assignment, and the auto-submit preference setting.

SKF Machine Work Notification Monitor Preference Settings

The following preferences are available in the SKF @ptitude Analyst Monitor application.

To access Monitor preferences:

- Run and maximize the SKF @ptitude Analyst Monitor application.
- Select the **Tools** menu's **Preferences** option. The Monitor's **Preferences** dialog displays.

| Preferences | | | | | |
|--|--|--|--|--|--|
| Colors Archive Event Log Work Notification | | | | | |
| Active CMMS | | | | | |
| Select one CMMS SKF CMMS SAP 4.7 Configure | | | | | |
| <pre></pre> | | | | | |
| Work notification archive | | | | | |
| © Delete after submitted | | | | | |
| C Keep for | | | | | |
| 1 Years | | | | | |
| G Keep last 399 work notifications | | | | | |
| | | | | | |
| Functional location | | | | | |
| | | | | | |
| C <u>M</u> achine name | | | | | |
| Repair by field | | | | | |
| Show, default to enabled | | | | | |
| ⊂ Show, default to disa <u>b</u> led | | | | | |
| C Do not show | | | | | |
| | | | | | |
| | | | | | |
| OK Cancel Help | | | | | |

Figure 2 - 1.

SKF @ptitude Analyst Monitor's Preferences / Work Notification Tab.

SKF @ptitude Analyst Monitor's **Work Notification** Preference settings allow you to customize how work notification submissions are processed.

Preference settings include:

Active CMMS area - Select a CMMS interface to configure your connection settings.

Select CMMS interface - Select the CMMS interface you wish to access from the drop-down list. Default is **<No Active CMMS>**.

CMMS interface options require an active license key through the License Key Manager. If the required license key is not available, the CMMS interface options do not display in the drop-down list.

Configure - Click the **Configure** button to set up the CMMS interface connection for the selected CMMS interface option. The SAP Logon Configuration dialog displays, allowing you to enter necessary connection information. This button is disabled if the <No Active CMMS> option is selected.

For details on the SAP Logon Configuration dialog, refer to Appendix A, SKF Machine Work Notification SAP Utility. **Submit work notifications automatically** – Select **On** to automatically submit completed, saved work submissions to a CMMS system, such as SAP. If the CMMS interface add-on is not installed, SKF @ptitude Analyst Monitor processes the work notification and generates its submit number. Select **No** to establish an approval process in which designated personnel must manually approve each work notification. If approval will be required, use @ptitude Analyst's **Administrator** dialog to manage access levels and settings so particular users have approval rights, as determined by the **Approve Work Notification** access level definition. Other Work Notification access level definitions are defined in the **Work Notification Access Level Definitions** section later in this chapter.

Work notification archive – Select the time frame to store work notifications. Options include:

Delete after submitted – Select to automatically delete work notifications once they are submitted.

Keep for – Select this option and indicate a time period to store submitted work notifications beginning with the time they are submitted. Enter the number and corresponding **Days**, **Weeks**, **Months**, or **Years** selection. **Keep last** – Select this option and indicate a number of submitted work notifications to store (up to 999). For example, enter 200 to keep the most recent 200 work notifications.

Keep forever – Select to store all work notifications forever.

Functional Location – Select the functional location, either **Asset name** or **Machine name**. The functional location setting determines how a machine is identified in the system. The functional location is either the machine's **Asset** name or **Machine** name. The functional location also identifies machines in some CMMS systems, such as SAP. The **Asset** name field is provided in the @ptitude Analyst **Group Properties** (**Machine**) settings as it can be modified to reflect existing naming conventions used in the CMMS system. For example, if a machine is identified in the CMMS system with the functional location "Floor 2, NW Sector," the same functional location text may be entered in the machine's **Asset** name field in the @ptitude Analyst software. Alternatively, the machine name may be selected as the functional location. SKF @ptitude Analyst Monitor's **Functional Location** preference setting determines how all ROUTE machines are identified. The selected functional location information is transferred to the Microlog Inspector / MARLIN during a ROUTE download.

Asset name is the default functional location.

Repair by field – Select the default display status for the **Repair By** field in the Work Notification dialog. Options include:

Show, default to enabled – Select this option to display the Work Notification dialog's Repair by field and to display the No requested repair date checkbox unchecked (disabled) by default. Work Notifications will, by default, require a Repair By date entry, or the No requested repair date checkbox must be clicked manually if a "repair by" date is not applicable.

Show, default to disabled – Select this option to display the Work Notification dialog's **Repair by** field and to display the **No requested repair** date checkbox checked (enabled) by default. Work Notifications will *not* (by default) have an indicated "repair by" date. If a "repair by" date is necessary, the **No requested repair date** checkbox must be manually unchecked (disabled) and the "repair by" information manually entered. **Do not show** – Select this option if you do not want to display the **Work Notification** dialog's **Repair by** field.

Work Notification Access Level Definitions

Administrators may add customized access levels, based on the defaults of the existing access levels, and assign to individual or multiple users.

In @ptitude Analyst / Administrator, use the **Levels** tab to customize access for particular users to meet your application's requirements. You can expand user access by *allowing* certain access rights to levels *not* given default access, or you can restrict user access by *preventing* access from levels *with* default access.

| Administrator | | | | × |
|---|-----------------------------|-----|----------------|---|
| Users Levels | | | | |
| | | | | П |
| Modify custom level: | New Level | | • | |
| - Properties | | | | |
| Name: | New Level | | | |
| | | | | |
| <u>D</u> efault base level: | -Uperator- | | <u> </u> | |
| Access settings: | -Administrator- Analyst- | | | |
| | -Operator- | | | |
| Access right | - Lechnician- | | | |
| 🖉 Manage Database | Default | No | -Analyst- | |
| 🖉 Manage Measurements | Default | No | -Technician- | |
| 🗸 Manual Entry | Default | Yes | -Operator- | |
| 🗸 MARLIN Download | Default | Yes | -Operator- | |
| 🗸 MARLIN Upload | Default | Yes | -Operator- | |
| Microlog Transfer | Default | Yes | -Operator- | |
| Modify access right | | | | L |
| | revent | C | Default | |
| - | | | | |
| | 1 | Add | <u>H</u> emove | |
| | | | | |
| | OK | Can | cel Help | |

Figure 2 - 2. The **Administrator** Dialog's **Levels** Tab.

The following access level definitions apply to SKF Machine Work Notification.

Refer to your @ptitude Analyst User Manual for more information on access levels, and a complete listing of all other access level definitions.

Administer Work Notification Setup

Allows access to modify SKF @ptitude Analyst Monitor's Work Notification autosubmit, delete, "repair by" field, and functional location preference settings.

Approve Work Notification

Allows access to approve work notifications manually when SKF @ptitude Analyst Monitor's Work Notification auto-submit preference is disabled.

Manage Work Notification Settings

Allows access to add, edit, and delete work notification settings (priority, problem description, corrective action, and work type).

Modify Work Notification

Allows access to add and edit work notifications.

Delete Work Notification

Allows access to delete work notifications.

Overview

Before generating new work notifications, you must first specify work notification settings. These settings, including **Priorities, Problem Descriptions, Corrective Actions,** and **Work Types**, are used to add important details when generating work notifications.

Work Notification Settings

SKF Machine Work Notification's **Tools / Work Notification Settings** dialog allows you to set up and define work notification **Priorities**, **Problem Descriptions**, **Corrective Actions**, and **Work Types** for use when generating work notifications from within @ptitude Analyst or from your Microlog Inspector / MARLIN device.

| Work Notifi | cation Se | ttings | | | | | × |
|-------------|---------------|---------------|----------------|----------|-----------|----------------|----------|
| Priorities | Problem D | escriptions] | Corrective Act | ions V | Vork Type | es] | |
| | | | | | | | 1 |
| Priorities: | | | | | | | _ |
| Code | Δ | Text | | | | | - 1 |
| 1 | | Fix Now | | | | | |
| 3 | | Moderate | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| - Propert | ties | | | | | | |
| Drineitu | a a da i | 3 | | | | | - |
| Filony | <u>c</u> ode. | | | | | | |
| Priority | <u>t</u> ext: | Moderate | | | | | |
| | | · | | | | | |
| | | | | A | dd 📗 | <u>R</u> emove | |
| | | | | | | | |
| | | | | | Close | | <u> </u> |
| | | | | | 0.000 | | |

Priorities

Figure 3 - 1. The Work Notification Settings / Priorities Tab.

Use the **Work Notification Settings** dialog's **Priorities** tab to create and edit priority settings to assign to work notification entries. For example, a priority described as "Fix Now" may have a corresponding Code 1, and a priority described as "Moderate" may have a corresponding Code 3. Your entered priority level(s) can then be assigned to new work notification items.

To submit work notifications to the CMMS, the priority settings must match those defined in the CMMS system.

To add a new Priority entry:

- Click the **Add** button.
- Enter the priority code and text in the appropriate fields.
- Click the **Save** button.

To remove an existing Priority entry:

- Select the priority entry to be removed from the **Priorities** window.
- Click the **Remove** button.

IMPORTANT – You cannot remove a work notification setting if it is currently assigned to a work notification.

Problem Descriptions

| Work Notification Settings | × |
|---|------|
| Priorities Problem Descriptions Corrective Actions Work Types | |
| Problem descriptions: | |
| Problem A | |
| Leaky Seal | |
| | |
| | |
| | |
| | |
| Properties | |
| Problem: Excessive Noise | - 11 |
| | |
| | |
| Add Berrove | |
| | |
| Close Hel | |
| | |

Figure 3 - 2. The Work Notification Settings / Problem Descriptions Tab.

Use the **Work Notification Settings** dialog's **Problem Descriptions** tab to enter and edit common problem descriptions to assign to work notification entries. For example, "Leaky Seal" or "Excessive Noise" are two possible problem entries. Your entered problem description(s) can then be assigned to new work notification items.

To add a new Problem Description entry:

- Click the **Add** button.
- Enter the problem name in the appropriate field.
- Click the **Save** button.

To remove an existing Problem Description entry:

- Select the problem entry to be removed from the **Problem Descriptions** window.
- Click the **Remove** button.

IMPORTANT – You cannot remove a work notification setting if it is currently assigned to a work notification.

Corrective Actions

| Work Notification Settings | × |
|---|---|
| Priorities Problem Descriptions Corrective Actions Work Types | |
| Correctice Actions: | |
| Action A | - |
| Repair Seal | |
| Shut Down | |
| | |
| | |
| | |
| Properties | |
| A <u>c</u> tion: Shut Down | |
| | |
| | |
| <u>A</u> dd <u>R</u> emove | |
| Close Help | |
| | |

Figure 3 - 3. The Work Notification Settings / Corrective Actions Tab.

Use the **Work Notification Settings** dialog's **Corrective Actions** tab to enter and edit corrective actions to take in response to specific work notification types. For example, "Shut Down," "Repair Seal," and "Check Oil" are three possible corrective action entries. Your entered action(s) can then be assigned to new work notification items.

To add a new Corrective Action entry:

- Click the **Add** button.
- Enter the corrective action description in the appropriate field.
- Click the **Save** button.

To remove an existing Corrective Action entry:

- Select the corrective action entry to be removed from the **Corrective Actions** window.
- Click the **Remove** button.

IMPORTANT – You cannot remove a work notification setting if it is currently assigned to a work notification.

Work Types

| Work Notification Settings |
|---|
| Priorities Problem Descriptions Corrective Actions Work Types |
| Work types: |
| Work type |
| Basic Care |
| Predictive Maintenance |
| |
| |
| |
| |
| Properties |
| Work type: Basic Care |
| |
| |
| |
| <u>A</u> dd <u>R</u> emove |
| |
| Close Help |
| |

Figure 3 - 4. The Work Notification Settings / Work Types Tab.

Use the **Work Notification Settings** dialog's **Work Types** tab to enter and edit work type descriptions to assign to work notification entries. For example, "Basic Care" and "Predictive Maintenance" are two possible work types. Your entered work type(s) can then be assigned to new work notification items.

To submit work notifications to the CMMS, the work type settings must match those defined in the CMMS system.

To add a new Work Type entry:

- Click the **Add** button.
- Enter the work type description in the appropriate field.
- Click the **Save** button.

To remove an existing Work Type entry:

- Select the work type entry to be removed from the **Work Types** window.
- Click the **Remove** button.

IMPORTANT – You cannot remove a work notification setting if it is currently assigned to a work notification.

Assigning the Functional Location

The functional location must be defined for each machine included in a work notification before it can be generated. If the functional location is defined as the asset name, you must enter the appropriate asset name for each machine in the machine's **Group Properties / General** tab, ensuring the asset name matches that machine's functional location, as defined in the CMMS system.

Use the **SAP Verify Functional Location** utility to verify the entered asset names match those found in the SAP CMMS system. Refer to **Appendix A, SKF Machine Work Notification SAP Utility** for more information on using the **Verify Functional Location** option.

Generating a New Work Notification

From the **Tools** menu, select the **New Work Notification** option. The **Work Notification** dialog displays.

| Work Notification | | × |
|----------------------------|--------------------------------------|-------------------|
| Machine name: | Hierarchy \ DEMO DATABASE \ FD FAN | Brows <u>e</u> |
| Functional location: | 1234-56789-10 | j |
| Date: | 10/ 4/2004 Time: 1:41:00 PM | 1 |
| <u>R</u> epair by: | 10/ 4/2004 No reguested repair date | |
| <u>O</u> perator: | ADMIN | |
| Priority: | 3 (Moderate) | [|
| Work type: | Basic Care | Types |
| Problem description: | Leaky Seal | Pro <u>b</u> lems |
| Problem <u>n</u> ote: | | * * |
| <u>C</u> orrective action: | Repair Seal | Actions |
| Action no <u>t</u> e: | | * |
| | OK Cancel | Help |

Figure 3 - 5. The **Work Notification** Dialog.

Use the **Work Notification** dialog to establish and generate a new work entry. If the system administrator has enabled the Auto-Submit preference in SKF @ptitude Analyst Monitor, work notifications are automatically submitted after they are completed and saved. If Auto-Submit is disabled, the designated personnel must approve each work notification. Once submitted, SKF @ptitude Analyst Monitor processes the work notification and attempts to submit it to the CMMS system.

If the available CMMS interface add-on is not installed, SKF @ptitude Analyst Monitor processes the work notification and generates its submit number.

By default, the auto-submit preference is enabled.

Enter appropriate information in the following fields.

Machine name – Click the **Select** button to browse to display the **Work Notification Machine** dialog's pop-up window containing your Hierarchy list. Locate and select the appropriate machine and click **OK**.

Functional location – Functional location is either the machine name or asset name (as determined by the system administrator) for the selected machine. The functional location is used in the some CMMS systems, such as SAP. If applicable, the functional location corresponding to the selected machine displays in this field.

Date – Click the arrow to display the pop-up calendar to specify the date the problem was detected.

Time – Use the up and down arrows to enter the time of day the problem was detected.

Repair by – Click the arrow to display the pop-up calendar to select the date the machine is to be repaired. Click the **No Requested Repair Date** checkbox to omit the repair by entry if a repair is not scheduled.

Priority – Select a priority level from the drop down list. Priority settings are configured in the **Work Notification Settings** dialog's **Priorities** tab.

Operator – Displays the operator name associated with the new work notification entry. If the work notification is uploaded from a Microlog Inspector / MARLIN device, the **Operator** field displays the Microlog Inspector / MARLIN operator's name. If the work notification is generated from @ptitude Analyst software, the **Operator** field displays the user currently logged in. You may also edit this field by typing in a different operator name.

Work Type – Click the **Work Type** button to select one or more work type(s) to assign to the work notification. Click the **Add** button to add a new work type. Work types are configured in the **Work Notification Settings** dialog's **Work Types** tab.

In the Problem Description area, enter machine problem information.

Problem Description – Select a problem description from the drop down list, or click the **Problems** button to select a problem description to assign to the work notification. Click the **Add** button to add a new problem description. Problem descriptions are configured in the **Work Notification Settings** dialog's **Problems** tab.

Problem Notes – Enter any applicable notes to associate with the problem selection, and to assign to the work notification.

In the Corrective Action area, enter corrective action information.

Corrective Action – Select a corrective action from the drop down list, or click the **Actions** button to select a corrective action to assign to the work notification. Click the **Add** button to add a new action. Action descriptions are configured in the **Work Notification Settings** dialog's **Corrective Actions** tab.

Action Notes – Enter any applicable notes to associate with the corrective action selection, and to assign to the work notification.

Click the **Issues** button to display any issues regarding your work notification in a pop up message box. Issues are errors messages due to discrepancies between work notification field entries (problem description, corrective action, priority, work type, machine name) between a work notification uploaded from a Microlog Inspector / MARLIN device and values stored in @ptitude Analyst, and any CMMS errors regarding submission.

Click **OK** to save your new work notification.

Work Notification Validation

The **Work Notification Validation** dialog launches when you fail to enter required information on the **Work Notification** dialog. The dialog indicates there is one or more warning, and prompts you to select to view or ignore the warnings. Your work notification is still saved, even if the **Work Notification Validation** dialog is triggered. However, its status displays as "**Incomplete**." If you do not wish to see the **Work Notification Validation** message box for warnings, uncheck to disable the "**Show this message box again**" checkbox.

| ✓ Show this message box again | |
|-------------------------------|--|

Figure 3 - 6. The **Work Notification Validation** Prompt Screen.

You may also modify this preference from the **Customize** menu's **Preferences** dialog.

Click **No** to close the message box without viewing the warning details. The work notification is saved with an "Incomplete" status.

Click **Yes** to view the **Work Notification Validation** dialog and review the warning details.

| Work | Notificatio | n Validation 🗙 | | |
|-------|----------------|---|--|--|
| The | following issu | ies were identified for the work notification: | | |
| | | | | |
| İssue | es: | | | |
| Le | vel 🛆 | Issue | | |
| | Warning | Corrective action must be provided. | | |
| | Warning | The asset name for the selected Machine must be provided. | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| • | | | | |
| | | Re <u>f</u> resh Close Help | | |

Figure 3 - 7. The **Work Notification Validation** Screen.

Managing Work Notifications

Use the **Tools** menu's **Work Notification Manager** dialog to add, remove, edit, and approve work notification entries either for submission to a CMMS (Computerized Maintenance Management Software) system, such as SAP, or if no CMMS system is present, for archiving in @ptitude Analyst.

| Work Notification Manager 🛛 🛛 🗙 | | | | | | |
|---------------------------------|--------------------------|--------------------|----------------|------------------|----------------|--------------------|
| S <u>o</u> urce: | My Hierarchies \ Demo |) Database \ Hiera | rchy \ WORK NO | TIFICATION | | <u>S</u> elect |
| Work notifications | , x | | | | | |
| Date/time V | Status | Submit number | Machine name | Funct | ional location | Issues |
| A 10/7/2004 | . Pending approval | | SKF FD FAN | FL-00 | 01020 | |
| 9 10/7/2004 | . Incomplete | | SKF BLOWER | | | |
| 0 10/7/2004 | . In queue | | SKF FD FAN | FL-00 | 01020 | |
| 📮 10/7/2004 | . Rejected | | SKF FD FAN | FL-00 | 01020 | 458752 |
| ✓ Show submitte | ed work notifications | | [| Re <u>f</u> resh | AļI | ▶ <u>C</u> lear |
| Problem descrit | otion: | | | | | |
| Leaky Seal. | | | | | | |
| Corrective action | on: | | | | | |
| Repair Seal. | | | | | | |
| <u>A</u> dd | <u>E</u> dit <u>R</u> em | ove Approv | /e | | Close | Help |

Figure 3 - 8. The **Work Notification Manager** Dialog.

Source – Determines the work notifications that display in the work notification manager. All work notifications attached to a machine within the selected source item display in the **Work Notification Manager's Work notifications** window. Click the **Select** button to display the **Work Notification Source** dialog to locate and select work notification source items.

Work notifications that are not associated with a machine always display in the Work Notification Manager, regardless of the selected source item.

All current work notification entries display in the dialog's **Work Notifications** area, identified by its:

Date/time – Displays the date and time the work notification was created.

Status – Displays the work notification's current status. There are five possible status displays:

Incomplete – Displays if the work notification has one or more incomplete fields.

Pending Approval – Displays if the work notification requires approval before it can be submitted.

In Queue – Displays if the work notification is waiting record is waiting to be processed (submitted).

Submitted –Displays if the work notification has been submitted.

Rejected – Displays if the work notification has been rejected by the CMMS system.

Submit number – Displays the work notification submit number automatically generated by the CMMS system (such as SAP), or SKF @ptitude Analyst Monitor (if the CMMS interface add-on is not installed).

Machine name – Displays the machine corresponding to the work notification.

Functional location – Displays the functional location corresponding to the work notification.

Issues – Displays applicable error messages due to discrepancies between work notification field entries (problem description, corrective action, priority, work type, machine name) between a work notification uploaded from a Microlog Inspector / MARLIN device and values stored in @ptitude Analyst, and any CMMS errors regarding submission.

Priority – Displays the work notification's assigned priority.

Work type – Displays the work notification's assigned work type(s).

Operator - Displays the operator name associated with the work notification.

Repair by date – Displays the assigned date the repair is to be complete, if applicable.

Problem description – Displays the work notification's problem description.

Corrective action. - Displays the work notification's corrective action selection.

Click the **Show submitted work notifications** checkbox to include work notifications that have been submitted in the **Work Notification Manager**.

By default, the **Show submitted work notifications** checkbox is enabled. Click the checkbox to disable and omit submitted work notifications from the **Work Notification Manager**.

Click the **All** button to select all work notifications in the list. Click **Clear** to clear all selections.

Click the **Refresh** button to re-query the database and update the dialog's **Work notifications** window contents. The **Refresh** feature allows you to manage work notifications effectively by monitoring them as they are processed. For example, a work notification's status will change as it is initially "In queue," and is then "Submitted."

Click **Add** to add a new work notification entry. The **Work Notification** dialog displays, allowing you to enter appropriate information for the new work notification.

Click **Edit** to edit the currently selected work notification. The **Work Notification** dialog displays, allowing you to edit fields as necessary.

You cannot edit a work notification that has been submitted, or is currently in the submission process.

Click **Remove** to delete the currently selected work notification(s).

Work notifications still "In Queue" cannot be removed.

Click the **Approve** button to approve the current work notification(s). The **Approve** button is only available if the system administrator has disabled the Auto-Submit preference in SKF @ptitude Analyst Monitor, and the current work notification's status is either "pending approval" or "rejected."

IMPORTANT – If a work notification is rejected, it must be manually approved, even if the Auto-Submit preference is enabled.

The **Problem Description** and **Corrective Action** for the currently selected work notification display in the dialog's **Properties** area.

Once a work notification is submitted, the notification information is stored with the machine as a machine note(s).

4 Additional Work Notification Settings

This chapter provides information on additional work notification settings available in SKF @ptitude Analyst software.

General Preferences

Use the @ptitude Analyst's **Customize** menu's **Preferences** option to display the **Preferences / General** tab.

| Preferences | × |
|---|-------------------|
| General Measurement Colors Plot | |
| | 1 |
| <u>S</u> ettings: | |
| Setting A | Value |
| Cloned group message | Off |
| Display measurement status in detail list | On 🔤 |
| Display multiple hierarchy warning | On |
| Frequency units | СРМ |
| Measurement date/time display options | Date and Time |
| Upen view in maximized mode | Uff |
| Process MARLIN Initiated upload | Un Aak te esue |
| Shared expression modification message | Ask to save |
| Show POINT setup issues | All |
| Show work notification validation | On |
| User without hierarchy access message | On |
| Work notification approve message | On |
| Work notification remove message | On 🚽 🗌 |
| | |
| Show work notification validation | |
| Value: On | |
| | |
| | |
| | |
| UK Cance | Apply Help |

Figure 4 - 1. The **Preferences** Dialog's **General** Tab.

The following **General** preference settings apply to SKF Machine Work Notification.

Refer to your @ptitude Analyst User Manual for more information on working with preferences, and a complete listing of all other preference options.

Work Notification Approve Message

Enable to display a message when an approver attempts to approve multiple work notifications with different status values (Incomplete, In Queue, etc). Select **On** to enable, or select **Off** to disable.

Work Notification Remove Message

Enable to display a message when a user attempts to remove multiple work notifications with different status values (Incomplete, In Queue, etc). Select **On** to enable, or select **Off** to disable.

Show Work Notification Validation

Enable to automatically display a message prompting you to view the warnings associated with your work notification entries on the **Work Notification** dialog. Select **On** to enable and display the message, select **Off** to disable the warning message.

Work Notification Toolbar Group

@ptitude Analyst's **Customize** menu's **Toolbars** option allows you to enable or disable any or all available toolbar buttons. Toolbar buttons are available for each menu item and available function. By default, only toolbar buttons for commonly utilized features are active. Buttons are arranged by related functionality in separate sections of the toolbar area.

The following custom toolbar applies to SKF Machine Work Notification.

Refer to your @ptitude Analyst User Manual for more information on working with custom toolbars, and a complete listing of all other toolbar groups.

| Toolbars | × |
|----------------------------------|------------------------------|
| Toolbars: | <u>B</u> uttons: |
| Name A | Name A |
| Help | M Kew Work Notification |
| Navigation | V work Notification Settings |
| I Online Tools | |
| Verlays | |
| ✓ Plot Views | |
| I™ Piots □ Preferences | |
| | |
| System Setup | |
| | |
| I View Icons ✓ Windows | |
| | |
| | |
| ✓ <u>D</u> isplay toolbar titles | |
| I Display toolbar in Jarge icons | |
| | OK Cancel Help |
| | |

Tools



The $\ensuremath{\text{Tools}}$ toolbar contains buttons for work notification specific operations.

The default setting is **off.**

Synchronizing the Microlog Inspector with SKF @ptitude Inspector

(Microlog Inspector only)

The Microlog Inspector differs from the MARLIN in the way that it communicates with SKF @ptitude Inspector. For MARLIN transfer information, reference the MARLIN Transfer Dialog Options section later in this chapter.

Before creating new work notifications, you must first specify work notification settings in the SKF Machine Work Notification software. These settings, including **Priorities, Problem Descriptions, Corrective Actions,** and **Work Types**, are used to add important details when generating work notifications.

Once created, synchronize the Microlog Inspector with the @ptitude software to transfer these settings to Microlog Inspector.

To set up the Microlog Inspector for data transfer:

- Set up communications on the **Microlog Inspector**. Reference your **Microlog Inspector User Manual** for details.
- On the Microlog Inspector main menu, click **Synchronize**. The Microlog Inspector communicates with SKF @ptitude Inspector and is recognized by @ptitude Inspector as an "available" device.
- In SKF @ptitude Inspector, assign a profile to the Microlog Inspector using the **Customize** menu's **Microlog Inspector Settings** dialog.
- On the Microlog Inspector, click the **Synchronize** button again to download the profile to the device.

You are now ready to collect data and transfer data between the Microlog Inspector device and SKF @ptitude Inspector software.

Refer to your SKF @ptitude Inspector User Manual and the SKF Microlog Inspector User Manual for more information on Microlog Inspector operations.

Work notifications are cleared from Microlog Inspector after they have been uploaded to the @ptitude software.

MARLIN Transfer Dialog Options

(MARLIN only)

The MARLIN differs from the Microlog Inspector in the way that it communicates with SKF @ptitude Inspector. For Microlog Inspector transfer information, reference the Synchronizing the Microlog Inspector with SKF @ptitude Inspector section earlier in this chapter.

The following work notification options are available in @ptitude Analyst's **Transfer / MARLIN** dialog.

Refer to your SKF @ptitude Inspector User Manual for more information on MARLIN operations.

Status

In the **MARLIN / Status** tab, select **Send work notification configurations** to download work notification settings to the MARLIN unit when you click the **Config** or **Clear** buttons.

| MARLIN - MARLIN re | ady | x | | | |
|---|---|---|--|--|--|
| Download To DAD Upload From DAD Status Communication | | | | | |
| Configuration parameters | | | | | |
| The following conf button is pressed. | figurations are sent to the device when the "Config" or "Clear" | | | | |
| Operator set: | <no operator="" set=""></no> | | | | |
| Enter the location | for automatic upload files. | | | | |
| Location: | <no location=""> Browse</no> | | | | |
| Send work not | ification settings | | | | |
| Device status inform | nation: | | | | |
| Internal Clock Data Source POINTs Download Version | 10/12/2004 9:33:53 AM ▲ Config Demo Database ded 2 4.100 | | | | |
| Free RAM Battery | | | | | |
| ROUTEs: | | | | | |
| NONROUTE Hierarchy | | | | | |
| | Close Help | | | | |

Figure 4 - 3. The **MARLIN / Status** Tab.

Upload

In the **MARLIN / Upload** tab, click the **Upload off-ROUTE work notifications** checkbox to upload existing work notifications that are not generated from a particular ROUTE.

| MARLIN - MARLIN ready | × |
|--|---|
| Download To DAD Upload From DAD Status Communication | |
| Select items to upload: | |
| NONROUTE Hierarchy | |
| Upload off-ROUTE work notifications | |
| Close Help | |

Figure 4 - 4. The **MARLIN / Upload** Tab.

Work Notification Report Options

The following work notification options are available in @ptitude Analyst's **Reports** dialogs.

Refer to your SKF @ptitude Analyst User Manual for more information on report operations.

Report Editor / Definition

The **Report Editor** dialog's **Definitions** tab allows you to define a new report's criteria, criteria settings, and content.

In the **Report Criteria** area, select **Work Notification** to include any work notifications associated with the hierarchy items included in the report.

| Report Editor | × |
|--|---|
| General Definition Assign Select report criteria: Select report criter | Criteria setup CLast fixed number of work notifications Work notifications(s) Work notifications in this date range From: 5/18/2007 S/18/2007 Work notifications from the last number of days 7 Day(s) ago All work gotifications |
| | OK Cancel Help |

Figure 4 - 5. The **Report Editor / Definition** Tab.

Select Report Template

The **Select Report Template** dialog displays all pre-defined @ptitude Analyst report templates. These templates may be used to generate reports without further modification, or as a starting point for creating custom reports.

| 9 | ielect Report Template 🛛 🗙 |
|---|---|
| | <u>S</u> elect template: |
| | Blank Exception History Last Measurement Overdue ROUTE History ROUTE Statistics SET Statistics Upload Statistics Work Notification |
| | OK Cancel Help |

Figure 4 - 6. The **Select Report Template** Dialog.

Select **Work Notification** to produce a report listing all work notification entries and details for the selected hierarchy item.

Appendix A SKF Machine Work Notification SAP Utility

This chapter provides information on work notification settings used with the available SAP Utility. The available SAP interface add-on allows you to automatically submit work notifications to the SAP CMMS system.

The SAP interface add-on is an optional component purchased separately.

SKF @ptitude Analyst Monitor SAP Preferences

Before you can submit work notifications to the SAP CMMS system, you must first enter the log on information for connection to the SAP CMMS system. You should contact your SAP administrator for all required connection information, including your SAP user name and password, and your client number.

If using SAP v4.7 (DCOM), you also need your customer ID and destination name.

If using SAP Dot Net, you also need your SAP server host name, and system number. Also, you should know whether your SAP server is accessed across a router, and if so, you'll need your local router's IP address, and port number, as well as the SAP router's IP address.

The following **SAP** preferences are available in the SKF @ptitude Analyst Monitor application.

To access Monitor preferences:

- Run and maximize the SKF @ptitude Analyst Monitor application.
- Select the **Tools** menu's **Preferences** option. The **Monitor's Preferences** dialog displays.
- Select the Work Notification tab.
- In the Active CMMS area, select the CMMS interface you wish to access from the Select CMMS interface drop-down list.
- Click the **Configure** button. The **SAP Logon Configuration** dialog displays.

| SAP v4.7 Logon Configuration | | | |
|------------------------------|----------------|--|--|
| Customer Id: | 75 | | |
| Destination: | cpce801 | | |
| Client: | 850 | | |
| User: | skfcm | | |
| Password: | ***** | | |
| Language: | EN | | |
| Connect status: | | | |
| | Connect | | |
| | OK Cancel Help | | |



SKF @ptitude Analyst Monitor's Preferences / SAP v4.7 DCOM Logon Configuration Dialog.

| SAP Version 7 Logo | n Information | × | |
|--|----------------------------------|---|--|
| Please provide the | following SAP logon information: | | |
| User Name: | skf | | |
| Password: | ****** | | |
| SAP Server Host: | cpcf501 | | |
| Client: | 800 | _ | |
| System Number: | 05 | | |
| Language: | EN | | |
| ✓ SAP server is accessed across a router | | | |
| Local SAP Router IP: swg-vxp-base | | | |
| SAP Router Port: | 3299 | | |
| SAP Router IP: | 255.255.255.255 | | |
| Test Connection | n | | |
| Work Notification Ty | ype: M1 | | |
| 0 | K Cancel Help | | |



SKF @ptitude Analyst Monitor's **Preferences / SAP Dot Net Logon Configuration** Dialog.

SKF @ptitude Analyst Monitor's **SAP Logon Configuration** settings allow you to enter logon information for connecting to the SAP CMMS (Computerized Maintenance Management Software) system.

SAP v4.7 (DCOM) Logon Configuration Dialog

SKF @ptitude Analyst Monitor's **SAP v4.7 (DCOM) Logon Configuration** dialog allows you enter log on information for connecting to the SAP v4.7 CMMS system through the DCOM connection.

- SAP no longer supports the DCOM connection to SAP and this configuration only works with SAP version 4.7
- SAP GUI version 6.2 or earlier must be installed prior to configuring the system.

| SAP v4.7 Logon Configuration | | | |
|------------------------------|----------------|--|--|
| Customer Id: | 75 | | |
| Destination: | cpce801 | | |
| Client: | 850 | | |
| User: | skfcm | | |
| Password: | ***** | | |
| Language: | EN | | |
| Connect status: | | | |
| | Connect | | |
| | OK Cancel Help | | |



SKF @ptitude Analyst Monitor's Preferences / SAP v4.7 DCOM Logon Configuration Dialog.

Enter appropriate log on information in the following fields:

Contact your SAP administrator for the required information to populate the fields below.

Customer ID - Enter the customer ID provided by your SAP administrator.

Destination – Enter your SAP CMMS destination name previously set up by your SAP administrator.

Client – Enter your SAP client number. The client number represents the specific SAP database of your physical location.

User – Enter your SAP user ID.

Password – Enter your SAP password.

Language – Enter your language code (i.e., EN) for the SAP application.

The connection status area displays the connection progress.

• Click the **Connect** button to reconnect to the SAP system, using your entered log on information.

SAP Dot Net Logon Configuration Dialog

SKF @ptitude Analyst Monitor's **SAP Dot Net Logon Configuration Dialog** allows you enter log on information for connecting to the SAP CMMS system (version 4.7 or 7.0) through a Dot Net connection.

The SAPRouter utility must be installed and configured by your SAP administrator prior to testing the SAP logon functionality.

| SAP Version 7 Logo | n Information | × | |
|--|----------------------------------|---|--|
| Please provide the | following SAP logon information: | | |
| User Name: | skf | | |
| Password: | ****** | _ | |
| SAP Server Host: | cpcf501 | _ | |
| Client: | 800 | _ | |
| System Number: | 05 | _ | |
| Language: | EN | | |
| SAP server is accessed across a router | | | |
| Local SAP Router I | ^{D:} swg-vxp-base | | |
| SAP Router Port: | 3299 | _ | |
| SAP Router IP: | 255.255.255.255 | _ | |
| Test Connection | 1 | | |
| Work Notification T | ype: M1 | | |
| 0 | K Cancel Help | | |

Figure A - 2.

SKF @ptitude Analyst Monitor's Preferences / SAP Dot Net Logon Configuration Dialog.

Enter appropriate log on information in the following fields:

Contact your SAP administrator for the required connection information to populate the fields below.

User Name – Enter your SAP user ID.

Password – Enter your SAP password.

SAP Server Host – Enter the name of the host computer running the SAP application.

Client – Enter your SAP client number. The client number represents the specific SAP database of your physical location.

System Number - A unique number given to each SAP system installed on a particular server.

Language – Enter your language code (i.e., EN) for the SAP application.

SAP server is accessed across a router - Enable to access the SAP server using a router. Enter the required router connection information, provided by your SAP administrator, in the fields below:

Local SAP Router IP - Enter the router IP address for the computer running @ptitude Monitor.

SAP Router Port - Enter the SAP router's port number. Default is 3299.

SAP Router IP - Enter the SAP router's IP address.

Test Connection – If a connection is established, a **Connection Succeeded** message displays. If a connection cannot be established, an SAP message dialog displays listing the error(s) preventing a successful connection. Make the necessary changes and try to connect again.

Work Notification Type - If an alternate code has been agreed to and communicated to the SKF SAP interface development team, enter the alternate work notification type code. Default is M1.

Using an alternate Work Notification type code not coordinated with the SKF SAP interface development team may result in errors when you submit a work notification.

SAP Functional Location Verification Utility – SKF @ptitude Analyst Monitor

Use SKF @ptitude Analyst Monitor's **SAP Functional Location Verification** dialog to verify the functional locations assigned in @ptitude Analyst match those found in the SAP CMMS system. This utility automatically compares the machine functional locations entered in @ptitude Analyst (in the **Group Properties / Asset Name** field) to the functional locations in the CMMS system. If the functional locations match, the machine "passes." If a match is not found due to an error when entering, such as a typo, the machine "fails."

To verify functional location:

• Select the Tools menu's Verify Functional Location option. The SAP Functional Location Verification dialog displays.

| SAP Functional Loc | ation Verification | | | | | × |
|--------------------|--------------------|----------|---------------------|-------|-----------------|---|
| Source: | My Hierarchies | | | | S <u>e</u> lect | |
| Include: | Pass and Fail | • | | | | |
| Verification: | | | | | | |
| Machine name | 7 | | Functional location | Stal | tus | |
| Hierarchy \ DEMO | DATABASE \ FD FAN | | 1234-56789-10 | Pa | ss | |
| | | | | | | |
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| | | | | | | |
| 1 | | | | | | |
| | | ⊻erify | Print | Close | Help | |
| | | | | | | |



SKF @ptitude Analyst Monitor's SAP Functional Location Verification Utility.

- Click the **Source** field's **Select** button to display the **Select Functional Location Source** dialog.
- From the **Select Functional Location Source** dialog, select the appropriate location source for the machines you wish to verify. You can select a @ptitude Analyst hierarchy, group, ROUTE, workspace, or a single machine.

All machines with an assigned functional location entered as the asset name from the selected functional location source field display in the dialog's **Verification** area.

IMPORTANT – Only machines with a functional location entered in the Group Properties / Asset Name field display in the Verification area. Machines with work notifications without assigned functional locations do not display.

• From the **Include** drop down list, select the items you wish to display in the dialog's **Verification** area. Select **Pass and Fail** to display all machines with an assigned functional location, select **Pass only** to display only machines with functional locations that match those in the CMMS system, or select **Fail only** to display only machines with functional locations that do not match those in the CMMS system.

To verify a machine's functional location:

- From the **Verification** area list, select a machine.
- Click the **Verify** button.

- The machine's verification result (**Pass** or **Fail**) displays in the **Verification** area's **Status** column.
- Adjust the **Include** drop down list selection as necessary to display the status of your machines.

To print verification results:

• Click the **Print** button to print a machine verification status report, including the machine names, functional location source, functional locations, and verification results.

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