



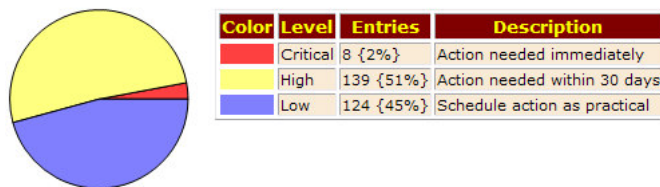
## Managing Condition Monitoring Contractors with Tango™ Reliability Management Web Service

Many industrial manufacturing plants have chosen to use condition monitoring and analysis contractors to provide some or all of the equipment condition monitoring performed at the plant. While the plant obtains many cost and performance benefits from using contractors, it incurs the responsibility of managing the performance and quality of the contractors' work and integrating the contractors reported problems and recommendations into the plant's maintenance management systems.

The Tango™ Reliability Management Web Service helps standardize and integrate condition monitoring results information from multiple contractors and multiple condition analysis technologies into a single database for easy and effective communication to anyone in the plant needing this information.

### Integrated Condition Status Report

User: TF7, Date: 06/21/2007, Time: 11:44:39



#### Open Condition Entries

	Severity	Asset	Component	Technologies	Days Awaiting Checkoff	Work Order Status	Work Order Numbers	Case Closure
	Critical	#1 Calcidyn Recirc Fan	Fan	Thermography, Ultrasonic Testing, Vibration - Route	72	0 of 4		Close Entry
	Critical	#1 Calcidyn Recirc Fan	Motor	Ultrasonic Testing, Vibration - Route	90	0 of 2		Close Entry
	Critical	Zone 2 South Recirc Fan	Fan	Vibration	976	3 of 10	<ul style="list-style-type: none"> <li>• 12345D</li> <li>• 12345D</li> <li>• 12345D</li> </ul>	Close Entry
	High	#4 Line Drive	Motor	Vibration	914	1 of 12	<ul style="list-style-type: none"> <li>• 12345E</li> </ul>	Close Entry

Figure 1: ICR

Contractors have a well-defined scope of supply to the plant; this is to evaluate the machines on an assigned critical machine list using the monitoring technology they specialize in and provide their conclusions about the equipment's suitability to reliably operate into the future. The interval between monitoring tasks and the extent of monitoring is defined in a contract between the contractor and the plant. In most cases, the contractor performs the work required and produces a report or results, which is emailed to the plant.

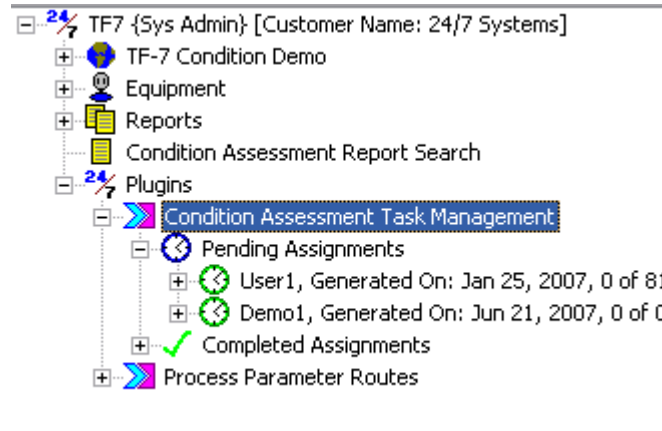


Figure 2: Task Assessment List

Tango™ may be used to define condition assessment tasks for specific monitoring technologies and plant areas. For example, the monthly vibration analysis for the utilities area or the quarterly oil analysis may be defined in a Tango™ Condition Assessment Task. Task results are specified from a menu of states (figure 3). These states allow the user to define the machine’s state at the time of monitoring. Every task item must be assessed before the task can be closed, so items missed or down must have that state assigned to them. History of the component’s health may be maintained and components which have been missed are maintained in a special list for “at risk” components, in need of assessment.

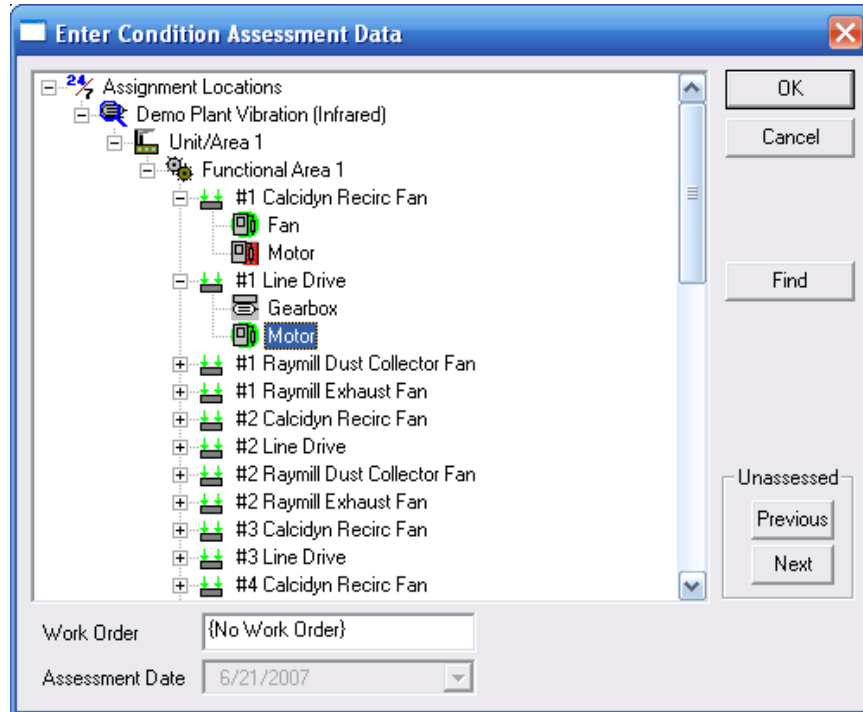


Figure 3: Open Task with States

Once a Condition Assessment Task is closed, Tango™ includes the task in the completed task list and an assignment report which produces a record of the results for that task assignment results can be generated.

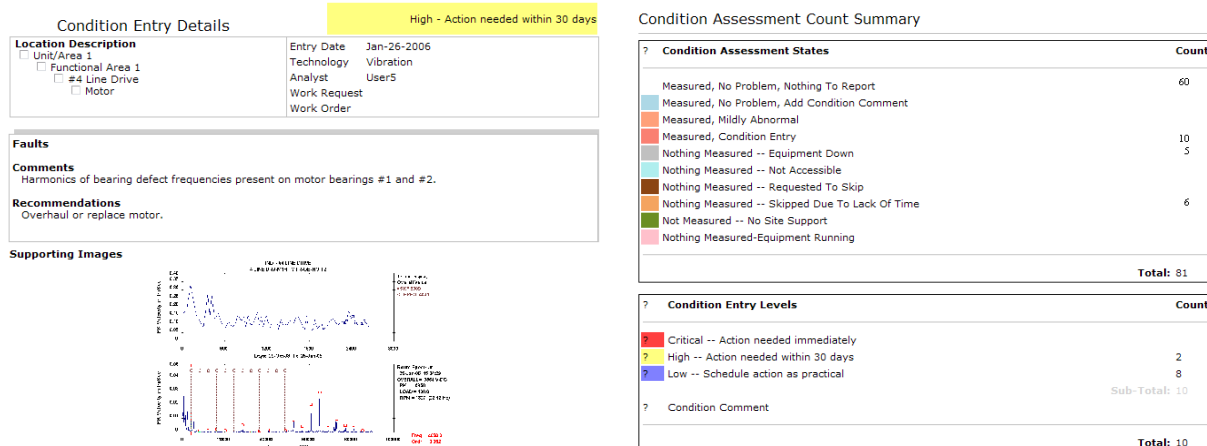


Figure 4: Assignment Report