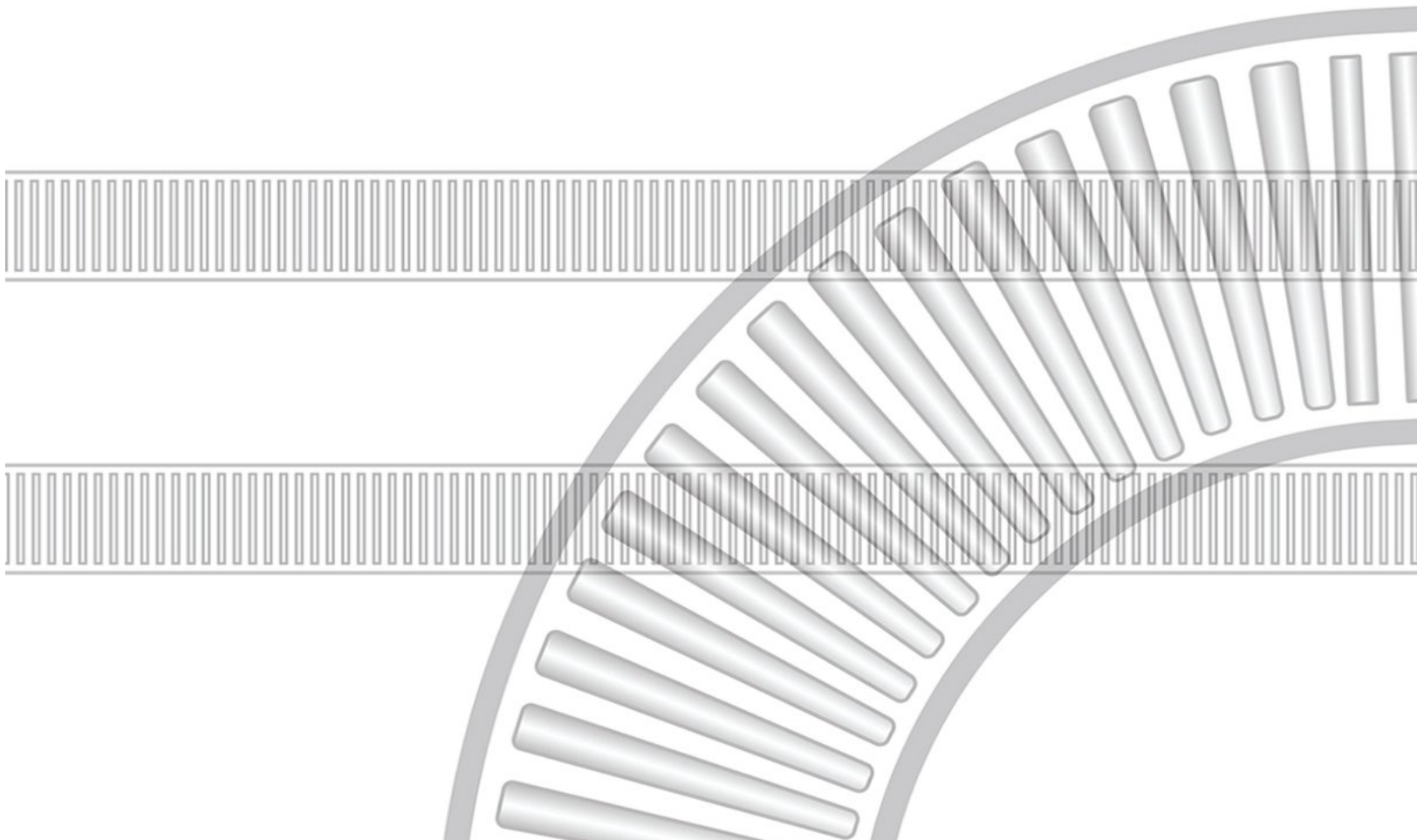




InControlWare 2.00.12

Launch Center User Guide

Publication No. 29383612
August 8, 2013



Legal Notices

Information in this document is subject to change without notice. No part of this document may be reproduced or transmitted to parties other than the customer and the customer's employees in any form or by any means, electronic or mechanical, for any purpose, without the express written consent of Intelligrated.

© 2013 Intelligrated. All rights reserved

This document contains confidential proprietary information and trade secrets of Intelligrated. This document is distributed with the understanding that it will not be disclosed to any third party, in whole or part, without the prior written consent of Intelligrated.

Trademarks

Accuglide™, Casemat™, Dashboard™, E-Z-set™, IntelliFlow™, IntelliStar™, I-Watch™, Knowledgebase™, NetLok™, OnTimeParts™, Palmat™, Trak3™, Trak3 xD™, Trak3 xL™, and Versa™ are trademarks of Intelligrated.

Accumat®, Accuzone®, Alvey®, BOSS®, Buschman®, EASYpick®, FKI Logistex®, IN-24x7®, InControlWare®, Intelligrated®, IntelliMerge®, IntelliQ®, IntelliSort®, Mathews®, SNE Systems®, Stearns®, Transitread®, and UniSort® are registered trademarks of Intelligrated.

Product and company names herein may be the trademarks of their respective owners.

Table of Contents

1	ABOUT THIS GUIDE	1
1.1	Documentation Conventions.....	1
1.1.1	Notes, Tips, and Important Information.....	2
1.1.2	ANSI Safety Statements.....	2
2	LAUNCH CENTER	5
2.1	Launch Center.....	5
2.2	Display Features	6
2.3	Profibus Card Manager	8
2.4	Machine Control	11
2.5	ICW Listener	13
2.6	ICW Service Manager	14

List of Figures

Figure 2-1 Launch Center	5
Figure 2-2 Launch Center Display Features	7
Figure 2-3 Profibus Card Manager	8
Figure 2-4 Profibus Card Information	9
Figure 2-5 Profibus Station (Node) Information	10
Figure 2-6 Machine Control	11
Figure 2-7 ICW Listener Status	13
Figure 2-8 ICW Service Manager Log	13
Figure 2-9 ICW Service Manager	14

List of Tables

Table 2-1 Machine Control Processes.....	12
--	----

About This Guide

1

1.1 Documentation Conventions

The following typographical conventions are used to distinguish between the different kinds of information presented in this guide, as follows:

Convention	Description
Bold	Used to identify menu selections, toolbar selections, and section references.
<i>Italic</i>	In paragraph text, italics identify the titles of documents that are being referenced. When used in conjunction with the monospace text described below, italics identify a variable that should be replaced by the user with an actual value.
<code>monospace text</code>	Text that represents programming code.
<code><i>monospace italic text</i></code>	Variables in programming code.
CTRL+X	A combination of keystrokes that are pressed simultaneously.
Function Function	A path to a function or dialog box within an interface. For example, “Select File Open ” indicates that you should select the Open function from the File menu.
() and	Parentheses enclose optional items in command syntax. The vertical bar separates items in a list of choices. For example, any of the following four items can be entered for this command: persistPolicy (Never OnTimer OnUpdate NoMoreOftenThan)

1.1.1 Notes, Tips, and Important Information

The following callouts and icons are used to highlight information throughout this guide:



Note or Tip

A Note highlights related information or information that is tangential to the topic being discussed. A Tip highlights useful information that can be used to simplify the tasks that are being discussed.



Important

Important callouts are used to highlight information of great significance or value that the reader should be certain to know before proceeding.

Notes, Tips, and Important callouts are used to call attention to useful information and are not safety notices.

1.1.2 ANSI Safety Statements

Safety statements contain information essential to the safety of personnel and equipment. Throughout this manual, and on the equipment, you will find DANGER, WARNING, and CAUTION signs. Pay particular attention to these because they signal information that is important to your safety and to the correct operation of the equipment.

Warning signs and labels posted on or near the equipment should not be removed, painted over, or altered at any time. Reference: ANSI Z535.4. All safety devices, warning lights, and alarms associated with the conveyor system must be regularly tested (at least monthly) for proper operation and serviced as needed. If the original safety item(s) become defective or damaged, refer to the conveyor parts list(s) of the bill(s)-of-materials for replacement part numbers.



The following safety statements are used in this manual:

DANGER

DANGER indicates a hazardous situation that, if not avoided **will** result in immediate, serious personal injury or death.

WARNING

A WARNING indicates a hazardous situation that, if not avoided, **could** result in death or serious injury.

CAUTION

A CAUTION indicates a hazardous situation that, if not avoided, **could** result in minor or moderate injury.

NOTICE

A NOTICE provides information that is considered important but is not hazard-related. This includes messages that discuss property damage.

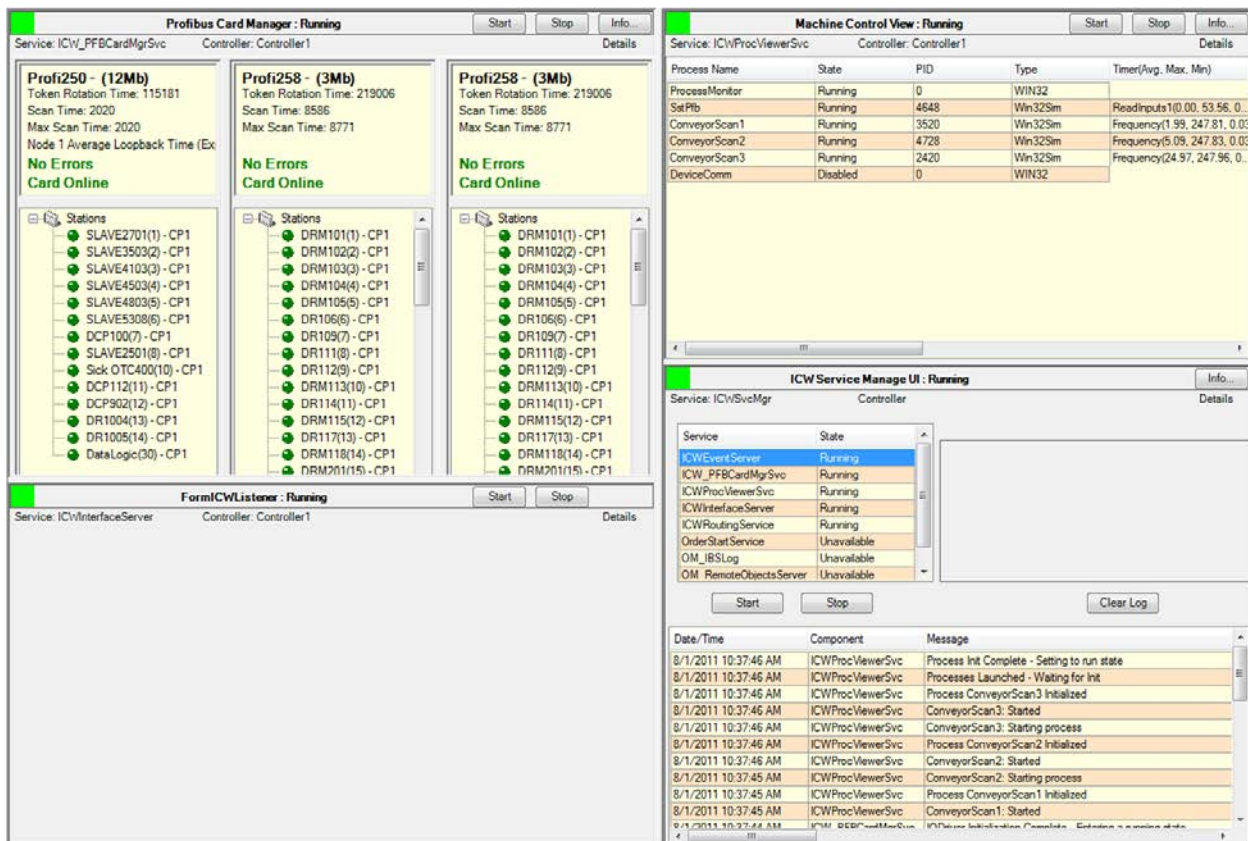
Launch Center

2

2.1 Launch Center

Launch Center is the tool used to start and stop the control system and many of the related services. Launch Center is typically configured as a tab in the user interface.

Figure 2-1 Launch Center



⚠ WARNING

Do not stop the conveying system when product is being conveyed. Product may be damaged, fall from the conveyor, spill, or release its contents. Product or product contents falling from an overhead conveyor may damage equipment or cause serious personal injury.

2.2 Display Features

Selection of a controller tab presents four panels with status and control information for the selected controller.

**Note**

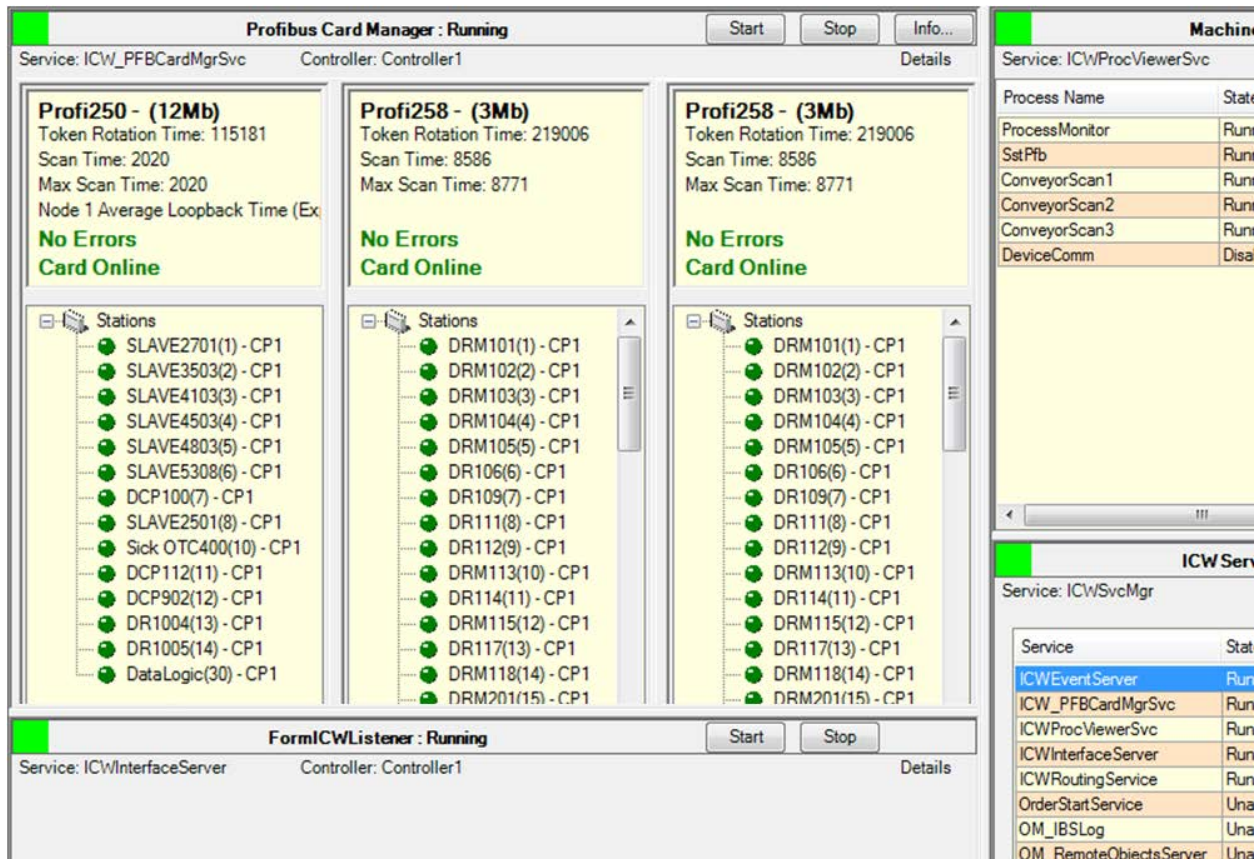
Multiple Controllers require multiple Launch Center tabs.

Launch Center for each controller is composed of four panels:

- Profibus Card Manager
- Machine Control View
- ICW Listener
- ICW Service Manager UI



Figure 2-2 Launch Center Display Features



In the upper left hand corner of each panel is a status indicator. This indicates if the related control functions are running or not.

- Green – started and running normally
- Yellow – transitioning to a started or stopped state
- Red – stopped or not running normally
- Blue – unknown state

ICW Service Manager UI does not Stop or Start. These services are managed individually or run automatically.



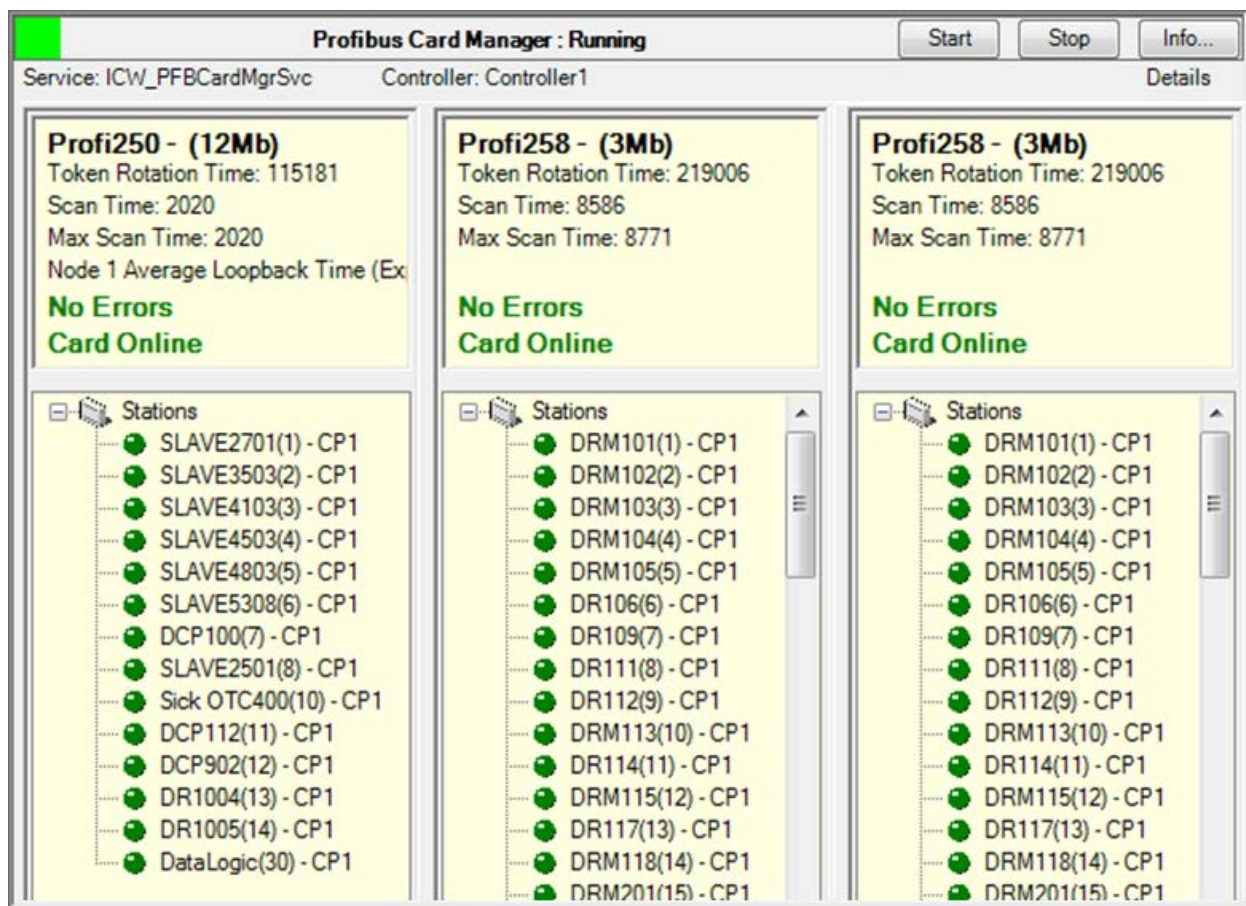
Note

The **Info** button found on each of the panels displays a dialog box containing information about the function of the panel.

2.3 Profibus Card Manager

The Profibus Card Manager is the service that manages the Profibus cards plugged into the Server backplane. These cards are registered with Windows Server but Profibus Card Manager Service loads the configuration required to operate the card and monitors the status of each network.

Figure 2-3 Profibus Card Manager

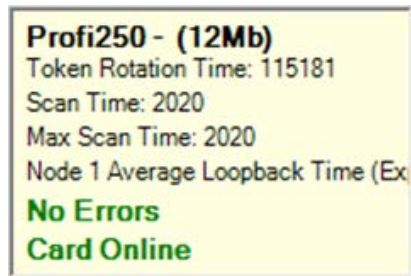




The card manager displays information for each Profibus card that is installed on a Server. Each card's information window is divided into two areas: card information and station (or node) information.

The card information area consists of the following types of information:

Figure 2-4 Profibus Card Information



- Token Rotation Time – The maximum amount of time (tbits) allowed for each scan of the card.



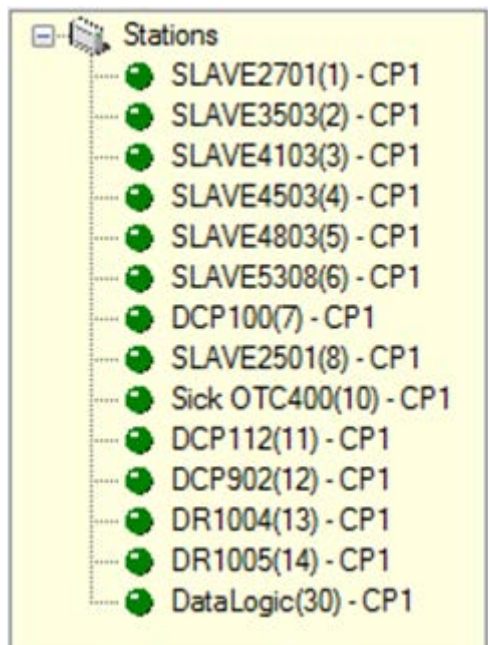
Note

A tbit is the transmission time for 1 bit of data.

- Scan Time – The average amount of time (microseconds) required to service all of the nodes on this channel of the Profibus card.
- Max Scan Time – The greatest amount of time (microseconds) that has been required to service all of the nodes on this channel of the Profibus card since the last reset.
- Card Status – The current status of the Profibus card.

The station (or node) information area consists of the following information about each node of the network:

Figure 2-5 Profibus Station (Node) Information

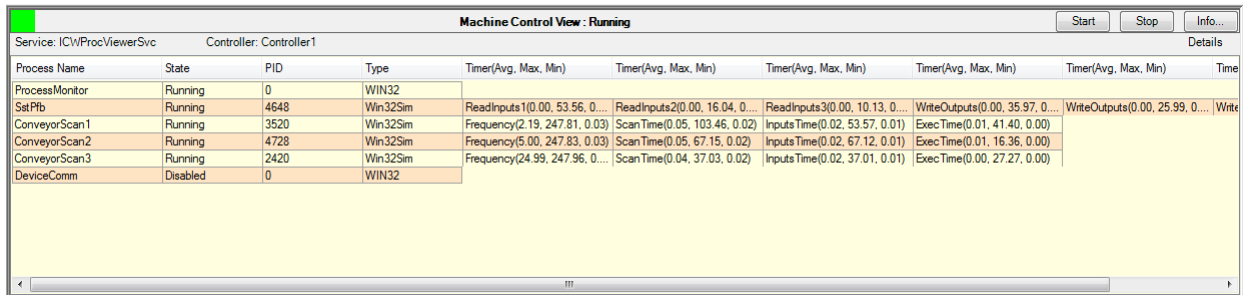


- Node Address – Each node has a unique numeric identifier.
- Node Name – The drive, panel, or device name associated with each node.
- Error Information – When everything on the node is functioning correctly the node status indicator appears green. When there is an error condition on the node the indicator appears red and a box appears allowing the operator to access expanded diagnostic information about the node.

2.4 Machine Control

The Machine Control View displays information about the processes currently running in machine control.

Figure 2-6 Machine Control



Machine Control View : Running									
Service: ICV/ProcViewerSvc		Controller: Controller1		Details					
Process Name	State	PID	Type	Timer(Avg, Max, Min)	Timer(Avg, Max, Min)	Timer(Avg, Max, Min)	Timer(Avg, Max, Min)	Timer(Avg, Max, Min)	Time
ProcessMonitor	Running	0	WIN32						
SetPfb	Running	4648	Win32Sim	ReadInputs1(0.00, 53.56, 0.00)	ReadInputs2(0.00, 16.04, 0.00)	ReadInputs3(0.00, 10.13, 0.00)	WriteOutputs(0.00, 35.97, 0.00)	WriteOutputs(0.00, 25.99, 0.00)	WriteOutputs(0.00, 25.99, 0.00)
ConveyorScan1	Running	3520	Win32Sim	Frequency(2.19, 247.81, 0.03)	ScanTime(0.05, 103.46, 0.02)	InputsTime(0.02, 53.57, 0.01)	ExecTime(0.01, 41.40, 0.00)		
ConveyorScan2	Running	4728	Win32Sim	Frequency(5.00, 247.83, 0.03)	ScanTime(0.05, 67.15, 0.02)	InputsTime(0.02, 67.12, 0.01)	ExecTime(0.01, 16.36, 0.00)		
ConveyorScan3	Running	2420	Win32Sim	Frequency(24.99, 247.96, 0.00)	ScanTime(0.04, 37.03, 0.02)	InputsTime(0.02, 37.01, 0.01)	ExecTime(0.00, 27.27, 0.00)		
DeviceComm	Disabled	0	WIN32						

CAUTION

Do not start or stop services unless instructed to do so by Intelligrated Technical Support personnel. Stopping a service may stop the conveying system, stop communication to all workstations, stop communication with Profibus devices, or have other serious effects.

The processes in the following table may appear in the machine control list of processes. The configuration varies from site to site.

Table 2-1 Machine Control Processes

Process	Type	Purpose
Conveyor Scan 1	RTX	Conveyor Scan 1 is responsible for the operation of the Sorters in the system. I-Watch, including Chain Care for Sliding Shoe Sorters, is part of this application.
Conveyor Scan 2	RTX	Conveyor Scan 2 is responsible for the operation of the Merges in the system. This includes all logic that manages the merges, including diagnostic and calibration functions.
Conveyor Scan 3	RTX	Conveyor Scan 3 is responsible for the operation of the rest of the system. This task is often called general conveyor since all of the other logic for the system is performed in the task.
I/O Driver	RTX	I/O Driver is responsible for the operation of the I/O in the system. This task does not have a defined update rate as it is called when needed by the other processes.
I/O DriverPLC	RTX	This process is used if Profibus bus-based PLC connections are operational for a system. This is used to transfer I/O and messaging between the PLC on the Profibus network and the controller.
Process Monitor Service	WIN32	This service monitors the state of the processes and presents this information to this tab.
CommDataHandler	WIN32	This is a legacy application that is used for TCP/IP communications and Database access. It has been replaced by the Routing and HostComm Services.
EventLog	WIN32	This service processes events loaded into the event log queue by the machine controller.
DeviceComm	WIN32	This is a legacy application that has been replaced by a Module in the Routing Service.

The Machine Control panel displays certain performance data that is associated with some of the processes. Intelligrated engineers use this data (showing the processing times of segments of the program) for diagnostic purposes.

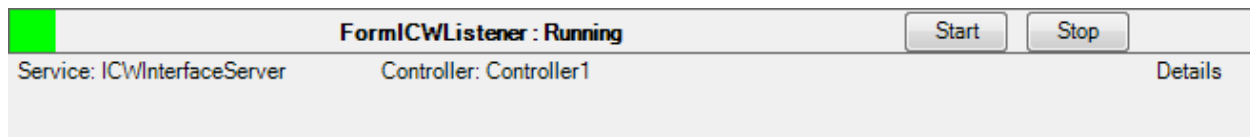
The number of timer values displayed can vary at the discretion of the project engineer. This is normal since timers can be added or removed by an engineer if required for troubleshooting. The status indicator remains green as long as the Machine Control Process Viewer is running.



2.5 ICW Listener

ICW Listener is the service used by client workstation applications to communicate with the machine controller. Data monitoring and supervisory control functions are supported using this service. If this service is not running, data display through the InControlWare user interface will stop. The status indicator is green when ICW Listener is running and red when it is stopped.

Figure 2-7 ICW Listener Status



The starting and stopping of the ICW Listener service is displayed in the log that is part of ICW Service Manager. Error conditions are also reported in this log.

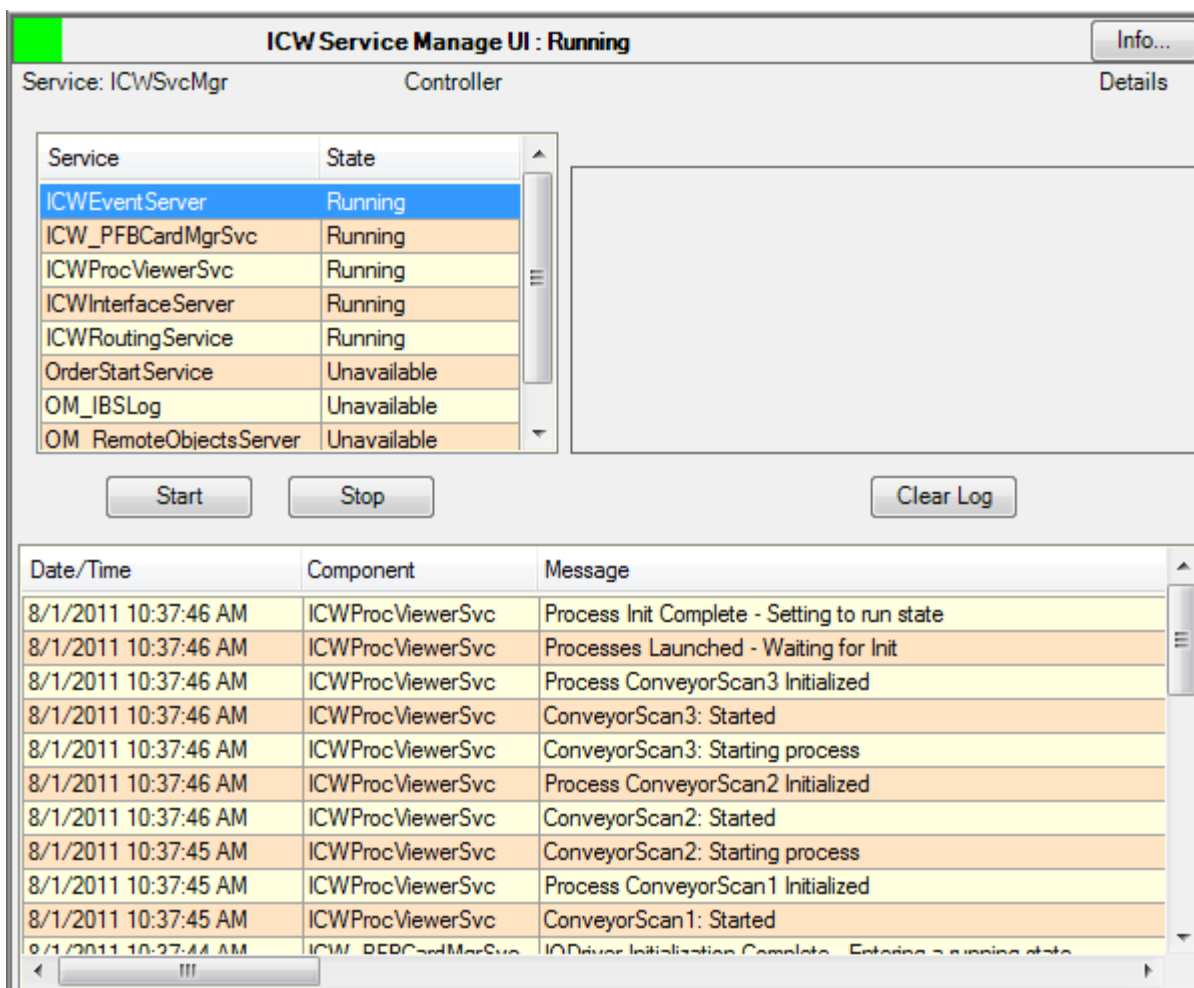
Figure 2-8 ICW Service Manager Log

Date/Time	Component	Message
8/1/2011 10:37:46 AM	ICWProcViewerSvc	Process Init Complete - Setting to run state
8/1/2011 10:37:46 AM	ICWProcViewerSvc	Processes Launched - Waiting for Init
8/1/2011 10:37:46 AM	ICWProcViewerSvc	Process ConveyorScan3 Initialized
8/1/2011 10:37:46 AM	ICWProcViewerSvc	ConveyorScan3: Started
8/1/2011 10:37:46 AM	ICWProcViewerSvc	ConveyorScan3: Starting process
8/1/2011 10:37:46 AM	ICWProcViewerSvc	Process ConveyorScan2 Initialized
8/1/2011 10:37:46 AM	ICWProcViewerSvc	ConveyorScan2: Started
8/1/2011 10:37:45 AM	ICWProcViewerSvc	ConveyorScan2: Starting process
8/1/2011 10:37:45 AM	ICWProcViewerSvc	Process ConveyorScan1 Initialized
8/1/2011 10:37:45 AM	ICWProcViewerSvc	ConveyorScan1: Started
8/1/2011 10:37:44 AM	ICWProcViewerSvc	IODriver Initialization Complete - Entering a running state

2.6 ICW Service Manager

ICW Service Manager displays the status of services running on a controller and provides a visible log showing activities related to services being started and stopped using ICW Service Manager. ICW Service Manager is designed to start and stop automatically. It is a single point of connection to all the services on a controller. (The list of services varies from site to site.) The status indicator is green whenever ICW Service Manager is running. The panel shows detailed status information when a specific service is selected.

Figure 2-9 ICW Service Manager





This panel can also be used to start or stop a service if required. Simply select a service then click on the appropriate buttons. The stop button stops the service without a warning dialog (any services with dependencies are also stopped).

CAUTION

Do not start or stop services unless instructed to do so by Intelligrated Technical Support personnel. Stopping a service may stop the conveying system, stop communication to all workstations, stop communication with Profibus devices, or have other serious effects.

Index

C

- card status, 9
- cautions, 11, 15
- CommDataHandler, 12
- controllers
 - multiple, 6
- conveyor scan 1, 12
- conveyor scan 2, 12
- conveyor scan 3, 12

D

- DeviceComm, 12
- display features, 6
- documentation conventions, 1

E

- error information, 10
- EventLog, 12

I

- i/o driver, 12
- ICW Listener, 6, 13
 - error conditions, 13
 - starting, 13
 - status, 13
 - stopping, 13
- ICW Service Manager, 6, 7, 14
 - log, 13
- info button, 8
- io driver plc, 12

M

- machine control, 11
- Machine Control
 - general conveyor, 12
 - i/o, 12
 - I-Watch, 12
 - log queue, 12
 - merges, 12
 - PLC i/o, 12
 - sorters, 12

- Machine Control View, 6
- multiple controllers, 6

N

- node address, 10
- node name, 10

P

- process monitor service, 12
- Profibus, 8
 - cards, 8
 - network, 8
- Profibus Card Manager, 6, 8
 - card information, 9
 - card status, 9
 - error information, 10
 - node address, 10
 - node information, 9
 - node name, 10
 - scan time, 9
 - Service, 8
 - token rotation time, 9

S

- scan time, 9
- station node, 10
- status indicators, 7
 - blue, 7
 - green, 7
 - red, 7
 - yellow, 7

T

- token rotation time, 9

U

- user interface, 5

W

- warnings, 6
- Windows Server, 8

