

批次管理解决方案

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PUBLIC



Allen-Bradley • Rockwell Software

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Automation**

批次处理产品概述

选择正确的产品

批次处理应用工具包



批次处理产品概述

选择正确的产品

批次处理应用工具包



*Plant*PAX

现代分布式控制系统

全厂
控制和优化

可扩展
且模块化

安全
开放且信息就绪

灵活
交付与支持

什么是批次过程？

- 批次生产指的是不连续的过程
 - 从原材料开始, 做些处理, 把中间产品或最终产品送到某个容器, 再重新开始。
- 一般用批次生产的工业包括:
 - 食品与饮料
 - 家用与个人护理
 - 生命科学
 - 化学制品



- 批次管理是用以优化批次过程的特定解决方案
- 批次管理必须面临的挑战包括:
 - 生产性能
 - 质量
 - 合规
 - 快速产品改变和调换
 - 提高产量
 - 安全
 - 可追踪
 - 效率
- 现有的工业标准:
 - ISA-88: 针对批次控制系统的设计
 - ISA-95: 针对控制系统与MES系统的集成

现代批次管理的特点

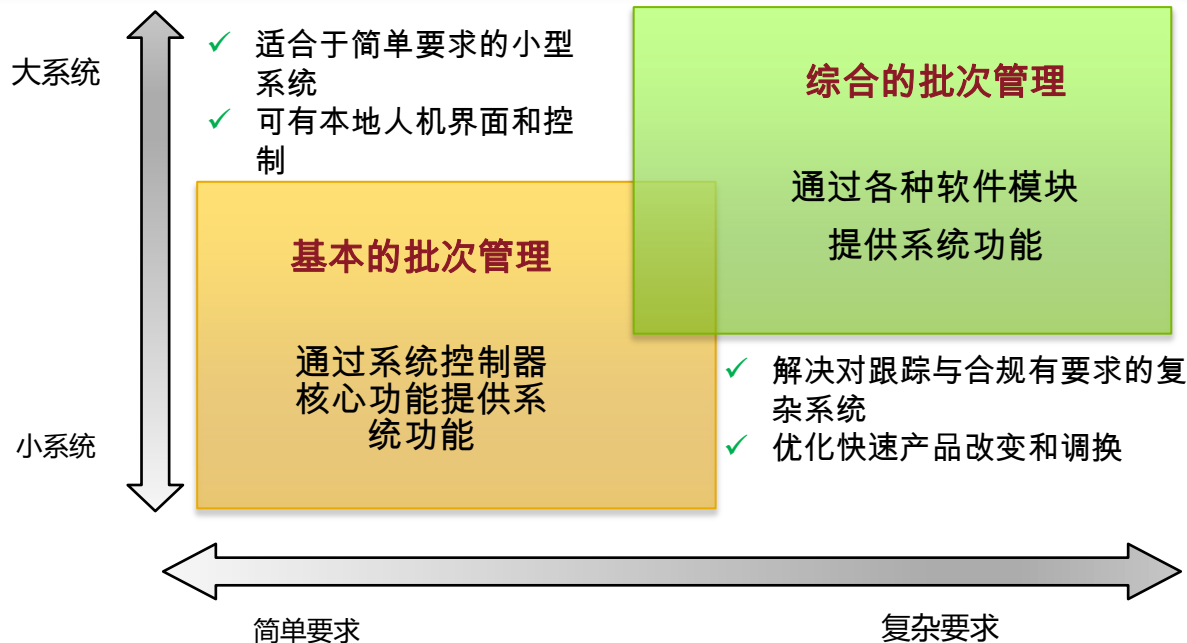
批次解决方案提供了基于 ISA88 顺序控制所要求的主要功能，并能：

- **更快和更可靠的控制**
- **建置与运行要有直觉体验**
- **系统需可扩展**
- **需为企业信息就绪**
- **数据要安全**

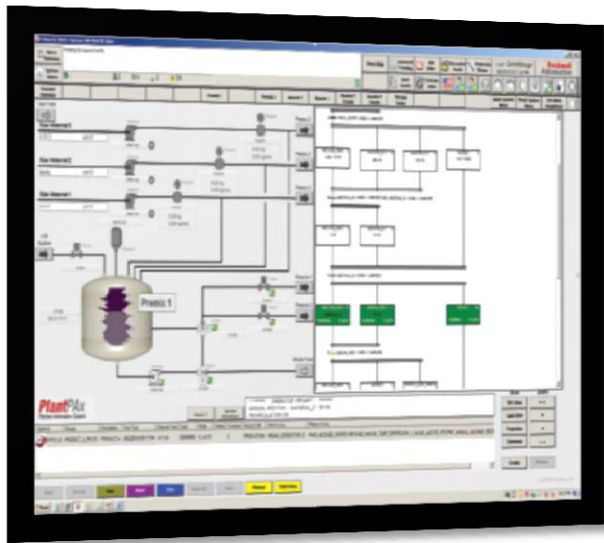
罗克韦尔自动化的批次产品组合独一无二地立足于技术的多样性，以实现这一批次管理理念。

罗克韦尔自动化的批次产品组合

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我们有最具扩展性和综合性的批次管理解决方案产品组合



FactoryTalk® Batch

介绍: [ftalk-pp002](#)
手册: [batch-um011](#)

概览

- 为有效，可预测运营提供综合性的批次管理
- 处理复杂的单元协调，资源仲裁 和路线优化
- 管理配方包括配比, 定标, 可靠的批准步骤和版本管理
- 集成的人机界面和报表

好处

- 使得批次处理具有一致性并可重复
- 为快速生产新产品达到灵活生产(食品, 饮料, 家庭和个人护理产品)
- 采用事件记录满足合规要求
- 为高度关联的生产系统管理设备仲裁要求

完成下列 ISA88 规范的批次控制工作内容

- **配方管理**
 - 提供配比（设定值）定义
 - 提供步骤（顺序）控制
 - 灵活，安全可靠的配方管理
- **生产计划与调度**
 - 协调批次计划和执行
 - 与MES/ERP 系统集成
- **生产信息管理**
 - 在批次运行时生成事件记录信息
 - 提供灵活的数据存储选项
- **过程管理**
 - 提供多单元协调
 - 允许用户定标批次
 - 路线优化
- **单元监控**
 - 单元分配
 - 资源仲裁
- **过程控制**
 - 有效的工程设计
 - 采用优选的PhaseManager™与Logix 控制器连接

- 为手工操作提供自动化的操作员步骤
 - 无需自动控制所需设备而自动化整个过程
 - 采用网页技术为操作员提供安全可靠的指示
 - 充分利用步骤中的标准操作规范，文件，视频和/或图像
- 将人工指示集成于自动化批次配方的执行中
 - 提供人工提示，数据采集，和在顺序运行中的标准操作规范.
 - 可在指示中连接条形码扫描器，数据库, 控制器
 - 直接集成与人机界面之中



典型的应用实例

- 手动批次执行和提示
- 复杂的标准操作步骤
- 便携式手持应用
- 产品换线和包装线变更
- 设备启动和关机顺序
- 非正常情况处理
- 清洁与维护步骤



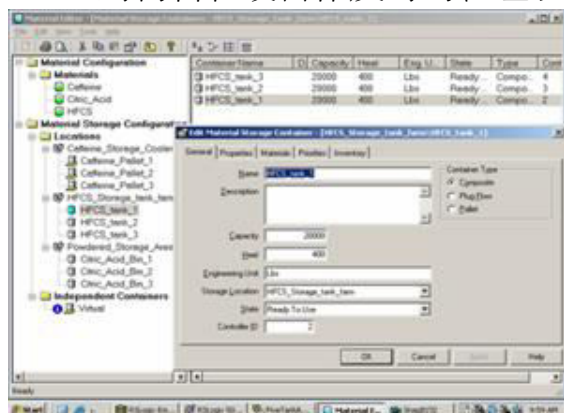
用以满足人工标准操作规范的要求

- 提供主动的物料管理/库存系统

- 定义存储地点，容器和物料
- 记录有关物料和设备使用的关键数据
- 提供物料批号跟踪和谱系

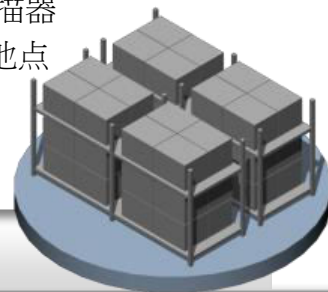
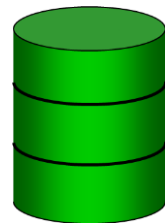
- 在批次执行中激活基于物料的阶段（phase）定义

- 使得能对物料和设备作及时的管理以提供灵活的批次生产和实时生产调度



- 可在哪里应用？

- 用作独立的物料管理/库存系统
- 为厂内物料库存系统与生产过程提供接口
- 用以集成物料识别系统，类似于条形码扫描器
- 基于物料的阶段能够更加灵活应对其存储地点



用以满足物料管理要求

标准的报表

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020-Batch Summary

Batch ID: 20090514_1100.01
Unique ID: 1
Recipe Name: PRODUCT_A
Area Name: PROCESS_DEMO
Process Cell: PRODUCTION
Product Code: Product A code
Product Description: Product A Procedure
Completion State: COMPLETE

Start Time: 5/14/2009 11:03:26 AM End Time: 5/14/2009 11:36:02 AM

Duration: 00:32:36

Batch Data

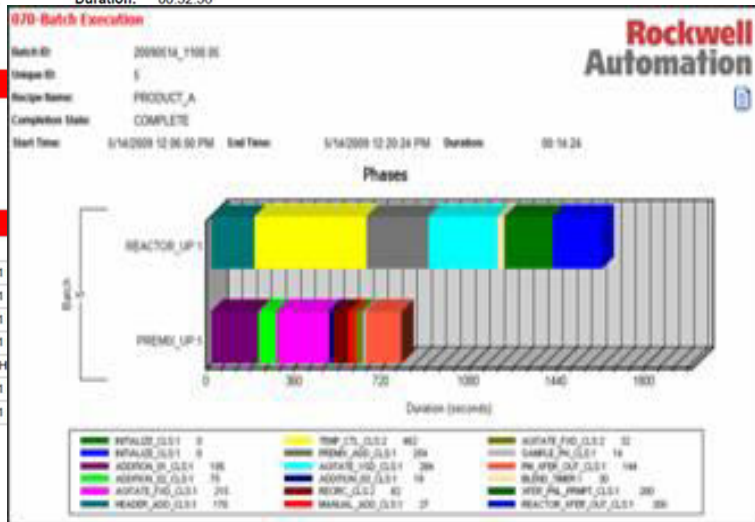
Unit Name	Unit Procedure	Operation	Phase
PREMIX_01	PREMIX_UP:1		
REACTOR_01	REACTOR_UP:1		

Setpoint vs Actual Summary

Recipe	Label
1:PRODUCT_A\PREMIX_UP:1\PREMIX_OP:1\ADDITION_01_CLS:1-1	SETPOINT_01
1:PRODUCT_A\PREMIX_UP:1\PREMIX_OP:1\ADDITION_02_CLS:1-1	SETPOINT_01
1:PRODUCT_A\PREMIX_UP:1\PREMIX_OP:1\ADDITION_03_CLS:1-1	SETPOINT_01
1:PRODUCT_A\PREMIX_UP:1\PREMIX_OP:1\MANUAL_ADD_CLS:1-1	SETPOINT_01
1:PRODUCT_A\PREMIX_UP:1\PREMIX_OP:1\SAMPLE_PH_CLS:1-1	SETPOINT_PH
1:PRODUCT_A\REACTOR_UP:1\REACTOR_OP:1\HEADER_ADD_CLS:1-1	SETPOINT_01
1:PRODUCT_A\REACTOR_UP:1\REACTOR_OP:1\PREMIX_ADD_CLS:1-1	SETPOINT_01

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Show All Levels



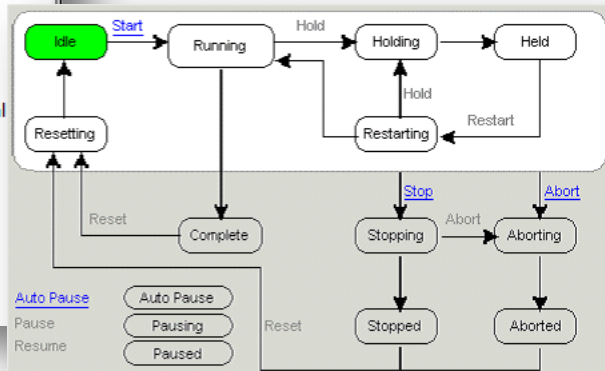
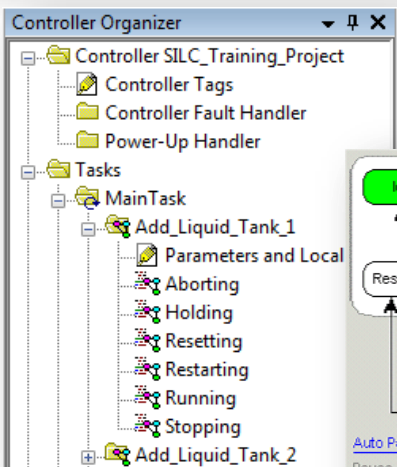
■ 质量



■ 计划与后勤



■ 工厂管理



概述

- 直接嵌入ISA88 状态模型到Logix控制器中
- 为批次管理软件提供一致的结构和接口
- 用最少的编程来处理状态的转换
- 与FactoryTalk® Batch同步方便

好处

- 使得对批次过程设备的编程，使用和管理更加方便
- 对整个工厂的设备保持一致的接口和控制表现
- 与批次管理软件容易集成



Rockwell Software

Studio 5000

简介: [ftalk-pp002](#)
手册: [logix-um001](#)

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FactoryTalk® View SE

概述

- 提供基本的批次管理
- 在基于Logix的控制器里，以事先设定的顺序执行PhaseManager™程序以完成面向过程的任务
- 包括集成的人机界面和报表
- 下一版的FactoryTalk® Batch将提供与顺序管理器的集成

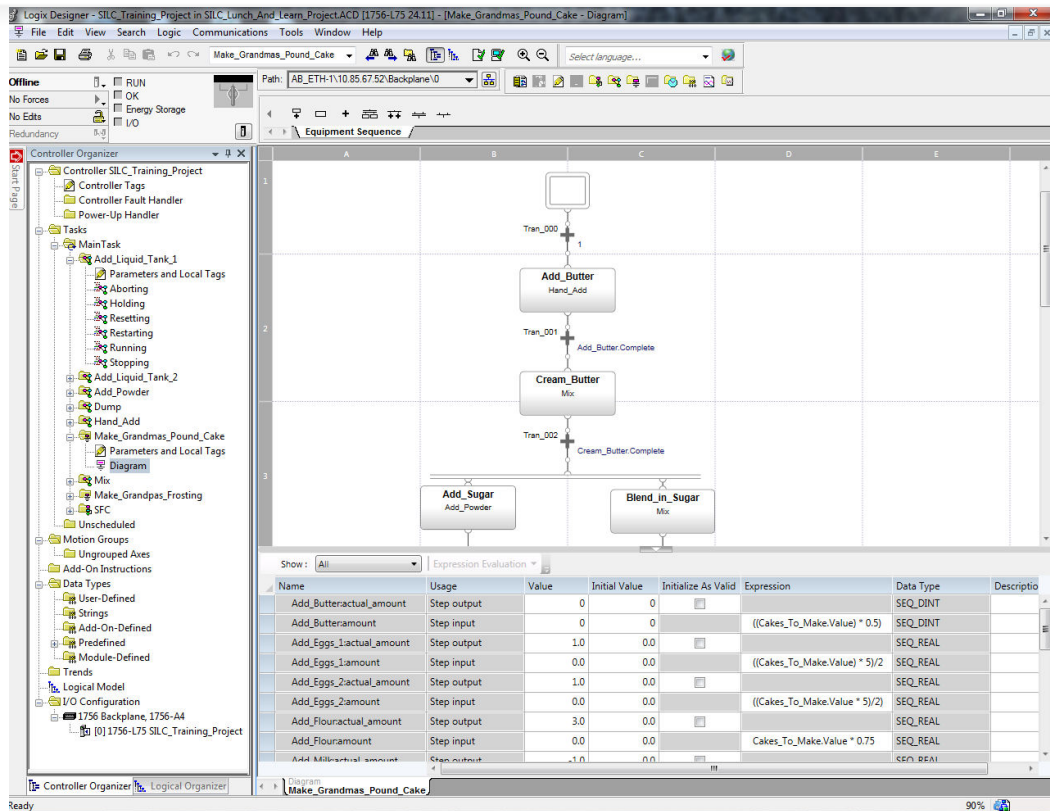
好处

- 方便地使用控制器的自有功能完成面向任务的顺序
- 集成的控制和人机界面提供了直观的操作手段
- 减少系统成本和软件复杂度

SequenceManager™

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- 什么是SequenceManager™？
 - 顺序管理器是在Logix控制器中的程序类型
 - 是一个执行单元操作的设备顺序
 - 是PhaseManager™ 的扩展
 - 采用 S-88批次模型基本概念

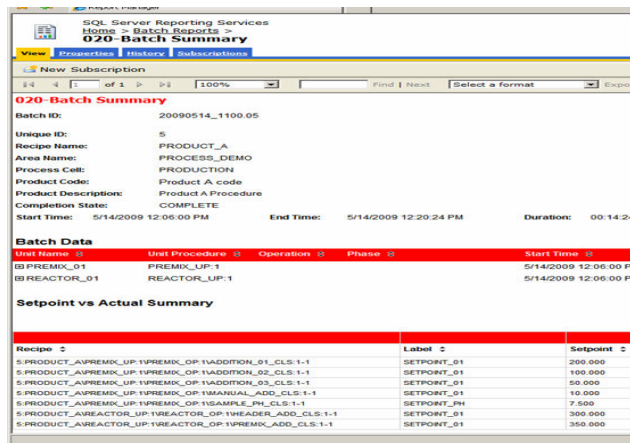


Logix Designer

SequenceManager™

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- 为什么要推出 SequenceManager™?
 - 使得顺序执行可以分散
 - 能以控制器自有方式执行快速和可靠的顺序
 - 在主要产品中有效地进行顺控开发和监视
 - 集成的控制和人机界面提供了直观的操作手段
 - 降低小系统的成本



SQL Server Reporting Services
Home > Batch Reports > 020-Batch Summary

View Properties History Subscriptions

New Subscription

Batch ID: 20090514_1100.05

Unique ID: S
Recipe Name: PRODUCT_A
Area Name: PROCESS_DEMO
Process Cell: PRODUCTION
Product Code: Product A code
Product Description: Product A Procedure
Completion State: COMPLETE
Start Time: 5/14/2009 12:05:00 PM End Time: 5/14/2009 12:20:24 PM Duration: 00:14:24

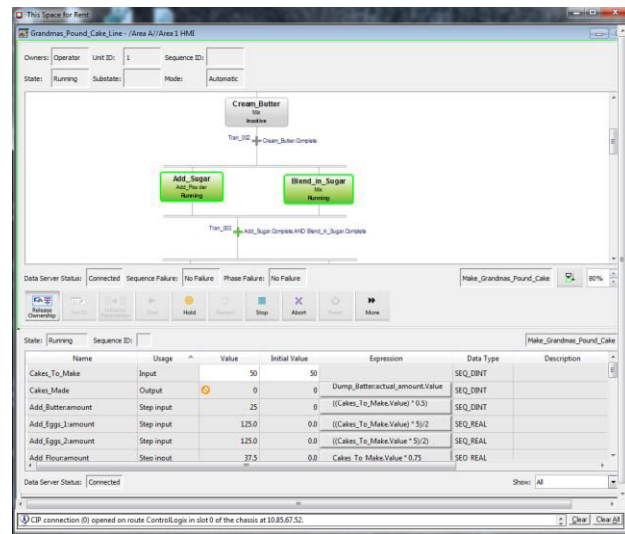
Batch Data

Unit Name	Unit Procedure	Operation	Phase	Start Time
00 PREMIX_01	PREMIX_UP.1			5/14/2009 12:05:00 PM
00 REACTOR_01	REACTOR_UP.1			5/14/2009 12:05:00 PM

Setpoint vs Actual Summary

Recipe	Label	Setpoint
S.PRODUCT_APREMIX_UP.1PREMIX_OP.1VADDITION_01_CLS.1-1	SETPOINT_01	200.000
S.PRODUCT_APREMIX_UP.1PREMIX_OP.1VADDITION_02_CLS.1-1	SETPOINT_01	100.000
S.PRODUCT_APREMIX_UP.1PREMIX_OP.1VADDITION_03_CLS.1-1	SETPOINT_01	50.000
S.PRODUCT_APREMIX_UP.1PREMIX_OP.1MANUAL_ADD_CLS.1-1	SETPOINT_01	10.000
S.PRODUCT_APREMIX_UP.1PREMIX_OP.1SAMPLE_PH_CLS.1-1	SETPOINT_PH	7.500
S.PRODUCT_AREACTOR_UP.1REACTOR_OP.1HEADER_ADD_CLS.1-1	SETPOINT_01	300.000
S.PRODUCT_AREACTOR_UP.1REACTOR_OP.1PREMIX_ADD_CLS.1-1	SETPOINT_01	350.000

报表



FactoryTalk View

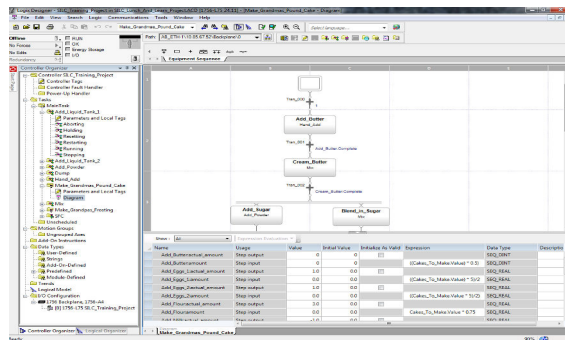
SequenceManager™

编辑, 监视, 和报表

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编辑和监视 – Logix Designer

定义与设备阶段协调的顺控步骤



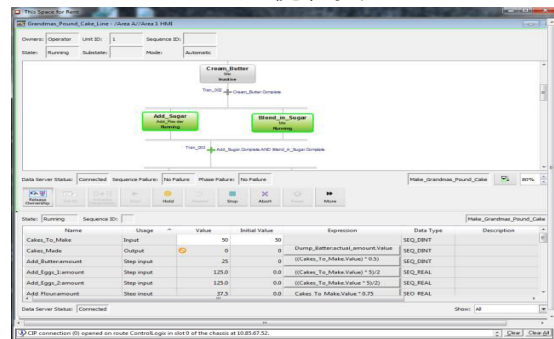
顺序执行

通过控制器中自有功能执行步骤顺序



操作员界面 - FTViewSE

在人机界面中对运行的顺序步骤进行监视和交互



020 Batch Summary

Batch ID: 00000514, 100.00

Recipe Name: PRODUCT_A

Area Name: PROCESS_DEMO

Process Code: PRODUCTION

Product Code: Product A code

Product Description: Product A Procedure

Completion Status: COMPLETE

Start Time: 5/14/2009 12:00:00 PM

End Time: 5/14/2009 12:00:24 PM

Duration: 00:14:24

Batch ID	Start Procedure	Operator	Process	Start Time
00000514	PRODUCT_A	PRODUCT_A	PRODUCT_A	5/14/2009 12:00:00 PM

Setpoint vs Actual Summary

Recipe ID	Setpoint	Actual	Setpoint
0	PRODUCT_A	PRODUCT_A	100.000
1	PRODUCT_A	PRODUCT_A	100.000
2	PRODUCT_A	PRODUCT_A	100.000
3	PRODUCT_A	PRODUCT_A	100.000
4	PRODUCT_A	PRODUCT_A	100.000
5	PRODUCT_A	PRODUCT_A	100.000
6	PRODUCT_A	PRODUCT_A	100.000
7	PRODUCT_A	PRODUCT_A	100.000
8	PRODUCT_A	PRODUCT_A	100.000
9	PRODUCT_A	PRODUCT_A	100.000

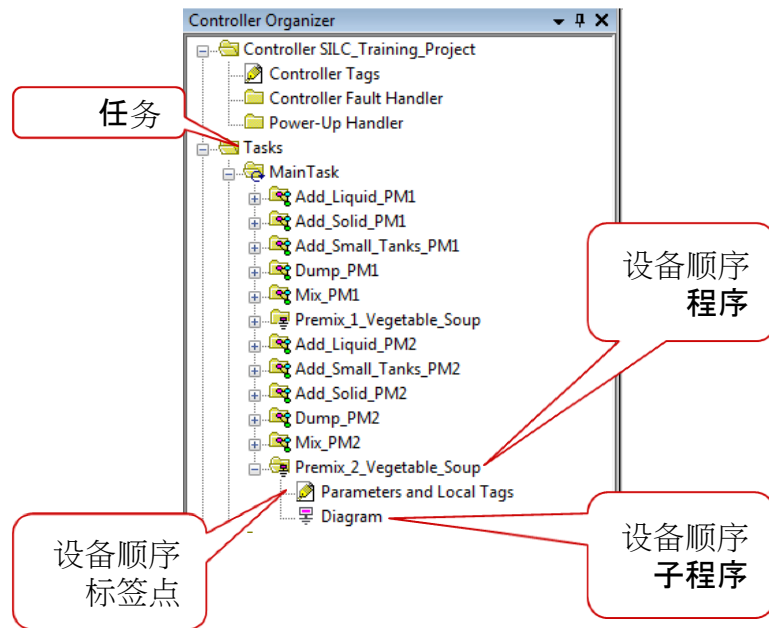
报表与分析

事件记录用于生成批次
报表和步骤分析

顺序管理器 – 什么是顺序？

顺序管理器是 LogixDesigner 的一个功能，用来编写设备顺序程序以协调多个阶段（phase）

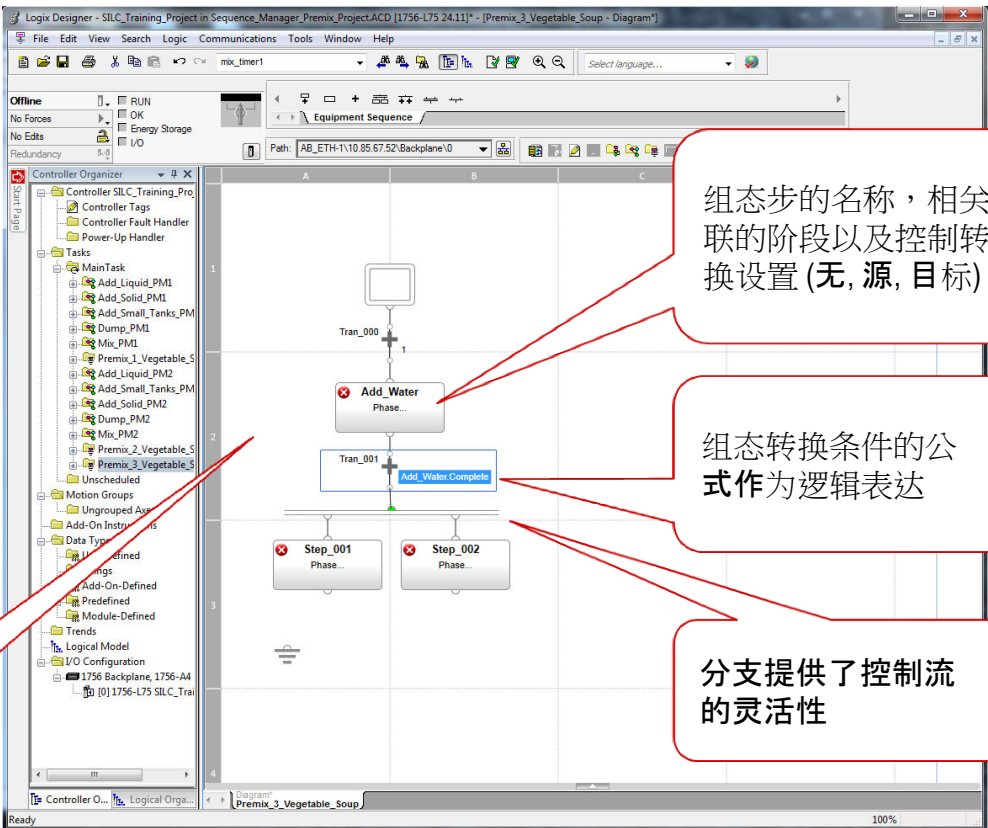
- 一个设备顺序是面向步骤的操作，用以操纵有限量的配料来生产出有限量的产品
- 换一种说法, 顺序完成操作中的一系列动作：
 - 顺序是一个程序: 设备顺序是一种新的程序类型
 - 图是一个子程序: 一个特殊的类似于SFC的语言，用来描述次序和条件并执行设备阶段（phase）
 - 顺序参数: 输入和输出参数



顺序描述了设备阶段的执行次序以及何时启动和停止阶段

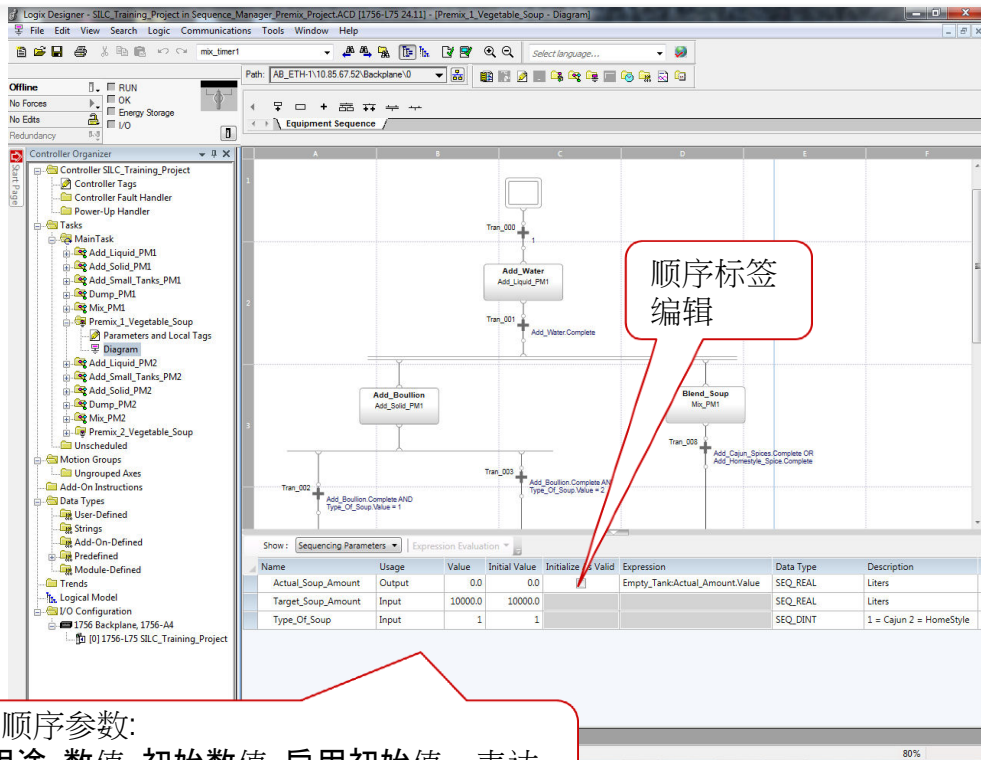
图编辑 – 用步和转换条件来表述一系列动作

- 图是一种特殊的顺序功能图 (SFC)
- 每一步表示一个设备阶段程序的使用，每部有其自己的输入和输出标签点
- 转换条件表示了什么时候步在执行中和复位中
- 允许执行同步分支或选择性分支



顺序标签编辑 - 顺序参数

- 图是一种特殊的顺序功能图
- 每一步表示一个设备阶段
- 每部有其自己的输入和输出标签点
- 允许执行同步分支或选择性分支
- 工程师创建和配置顺序输入与输出
- 程序参数输入引用设备和顺序外的过程值



组态顺序参数:
名, 用途, 数值, 初始数值, 启用初始值, 表达式, 数据类型 和说明

所有的显示

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soup_line - /SoupLine//Areal

Liquids

Solids

Small Tanks

Premix 1 Premix 2 Premix 3

Reload

State: Idle Sequence ID: Premix_1_Clean

Name	Usage	Value	Initial Value	Initialize As Valid	Expression	Data Type
Amount_Water	Input	25000	25000			SEQ_DINT
Add_Soap:Add_Inj...	Step input	0	0		3	SEQ_DINT
Add_Soap:Amount	Step input	0.0	0.0		Add_Water...	SEQ_REAL
Add_Water:Amount	Step input	0.0	0.0		Amount_W...	SEQ_REAL
RinseMix_Time	Step input	0	0			SEQ_DINT
Add_Soap:Actual_A...	Step output	0.0	0.0			SEQ_REAL

Show: All

Sequence Name	ID	State	Mode	Phase Failure	Sequence Failure	Owners	Unit ID
PlaySequence		Idle	Automatic	No Failure	No Failure	<none>	1
Premix_1_Clean		Idle	Automatic	No Failure	No Failure	Operator	1
Premix_1_Vegetable...		Complete	Automatic	No Failure	No Failure	<none>	1
Premix_2_Vegetable...		Idle	Automatic	No Failure	No Failure	<none>	1
Premix_3_Vegetable...		Idle	Automatic	No Failure	No Failure	<none>	1

Tran_000

Add Water
Add_Liquid_PM1
Inactive

Tran_001

Add Soap
Add_Small_Tank_PM1
Inactive

Tran_002

Rinse
Mix_PM1
Inactive

Tran_003

Empty Tank
Dump_PM1
Inactive

Release Ownership Set ID Start Stop Abort Reset More

83% Premix_1_Clean

顺序管理器报表

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030-Batch Detail

Batch ID: 20160402_Prod_A01
Unique ID: 1459626760627710
Recipe Name: Premix_01_Prod_A
Area Name: 00A8E21A
Process Cell: 00A8E21A

Product Code:

Product Description:

Completion State: COMPLETE

Start Time: 4/2/2016 3:52:40 PM

End Time: 4/2/2016 3:58:21 PM

Duration: 00:05:41.00

Batch Data

Unit Name	Unit Procedure	Operation	Phase	Start Time
1				4/2/2016 3:52
	Premix_01_Prod_A			4/2/2016 3:52
		Addition_01		4/2/2016 3:52

Recipe Parameters

Step_001:MAT

Step_001:SETP

Step_001:TOLI

Report Parameters

Step_001:ACT

Step_001:ACT

Step_001:IN_T

Step_001:LOT

Step_001:TAR

der New Data Source Upload File Report B

Name ↓

[010-Batch Listing](#)

[020-Batch Summary](#)

[030-Batch Detail](#)

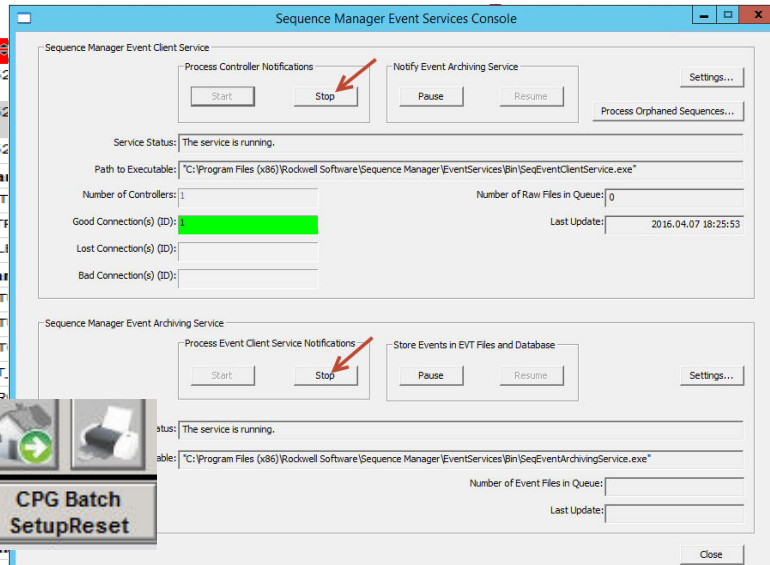
[070-Batch Execution](#)

[080-Duration Comparison](#)



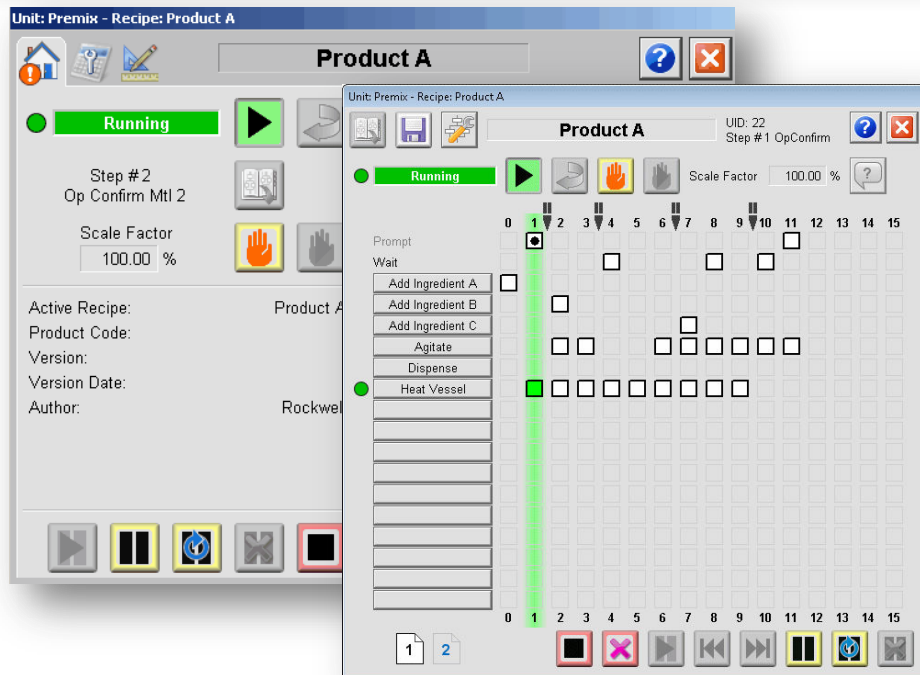
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v1.4.2

Hide All Levels



LBSM: Logix批次与顺序管理器

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简介: [proces-pp004](#)
手册: [proces-rm007](#)

概述

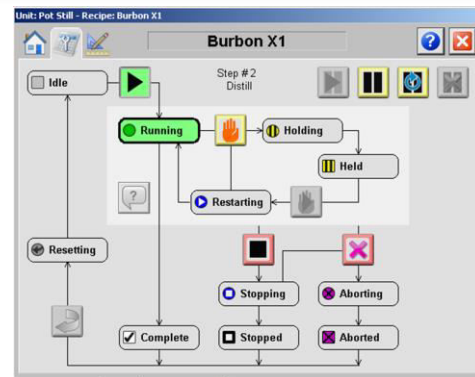
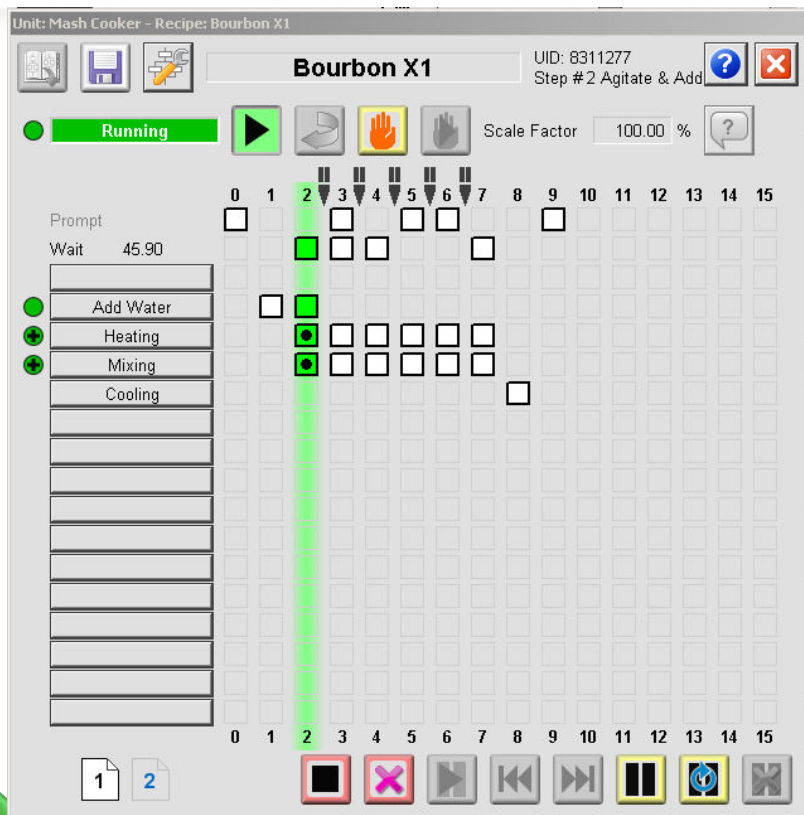
- 提供基本的基于控制器的批次管理，适合于单个单元或多个独立单元的操作
- 支持 PhaseManager™ 或其他定制顺序
- 包含人机界面对象支持 PanelView™ 和分散的应用

好处

- 最小化对花费大，定制编程工程量多的顺序管理解决方案的需求
- 减少对基于单元（skid）的批次过程设备工程花费，和交付时间

运行显示

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Mash Cooker - Prompt

Please add following ingredients:

Parameter Values

Malt 5.00 ✓ Kg

Com 2.90 ✓ Kg

Rye 2.00 Cup

✓

组态显示

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Unit: Mash Cooker - Recipe: Bourbon X1 - Configuration

Recipe Name: Version: Author:

Product Code: Version Date: ☐ Hold on Fault

Master Recipe

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Prompt	☒																							
Wait		☒	☒	☒	☒	☒	☒	☒	☒															
Add Water			☒	☒																				
Heating				☒	☒	☒	☒	☒	☒															
Mixing				☒	☒	☒	☒	☒	☒															
Cooling									☒															

Unit: Mash Cooker - Recipe: Bourbon X1

Bourbon X1

Unit Name: Unit Number:

Allowable Scale Range (%) Minimum: Maximum:

Equipment Configuration

0 - 7	8 - 15	16 - 23	24 - 31
Add Water			
Heating			
Mixing			

Unit: Mash Cooker - Recipe: Bourbon X1 - Easy Configuration

Allow Pause after Step ☐

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Prompt	☒																															
Wait		☒	☒	☒	☒	☒	☒	☒	☒																							
Add Water			☒	☒																												
Heating				☒	☒	☒	☒	☒	☒	☒																						
Mixing				☒	☒	☒	☒	☒	☒	☒																						
Cooling									☒																							

Unit: Pot Still - Equipment: Heating

Equipment Name: Phase Name:

Real Parameters

Phase	EM	Name	EU	Low	High	Scaled	Default
☒	☒	Temp_SP	DegF	100.00	200.00	☐	
☒	☒	Rate	DegF/sec	0.00	100.00	☐	0.00
☐	☐			0.00	100.00	☐	0.00

Boolean Parameters

Phase	EM	Name	Default	Off State	Default	On State
☐	☐		☒	☐	☐	☐
☐	☐		☒	☐	☐	☐
☐	☐		☒	☐	☐	☐

Reports

Phase	EM	Name	EU
☐	☐		

020-Batch Summary

Batch ID: 8311277
Unique ID: 8311277
Recipe Name: Bourbon X1
Area Name: LBSM
Process Cell: LBSM
Completion State: Complete
Start Time: 7/6/2015 12:17:21 PM

End Time: 7/6/2015 12:31:51 PM Duration: 00:14:30.173

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v1.4.5

Show All Levels

Event Queue Processor

Control Settings

Service

Start Resume Pause Stop

Status: The event queue processor service is running.

New Data Source Upload File Report B

Name ↓

- 010-Batch Listing
- 020-Batch Summary
- 030-Batch Detail
- 070-Batch Execution
- 080-Duration Comparison

Phase	Start Time			
	7/6/2015 12:17:30 PM			
1	7/6/2015 12:17:30 PM			
Add Water:1	7/6/2015 12:17:30 PM	7/6/2015 12:17:50 PM	00:00:20.700000	
	7/6/2015 12:17:52 PM	7/6/2015 12:17:57 PM	00:00:04.480000	
	7/6/2015 12:17:52 PM	7/6/2015 12:17:57 PM	00:00:04.980000	
	7/6/2015 12:17:52 PM	7/6/2015 12:18:14 PM	00:00:22	
	7/6/2015 12:18:53 PM	7/6/2015 12:18:54 PM	00:00:00.880000	
2	7/6/2015 12:18:53 PM	7/6/2015 12:18:54 PM	00:00:00.880000	

PCDC – 搜索 “LBSM” 下载

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Select one or more products to view the available downloads for those products. You also have an option to view firmware compatibility for a given product.

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Start by selecting products

Product Search:

lbsm

All Categories ▼

All Families ▼



Example: 1756-L61, L65, Logix, Ethernet

You can also filter by product category or family.

LBSM Logix Batch & Sequence Manager is a configurable PlantPax batch & sequencing solution for small systems with simple requirements

Selections

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Views

Save

☒ LBSM

3.10.03



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批次处理产品概述

选择正确的产品

批次处理应用工具包

顺控选择表

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顺控方案	顺序过程		顺序编码执行		顺序复杂性		顺序组态
	ISA-88 批次	ISA-106 任务	基于 控制器	基于 服务器	顺序 步数	顺序 结构	
顺控器 对象库 (P_Seq)		X	X		≤500	连续 同步 循环	FactoryTalk View SE/ME
LBSM	X		X		≤32	连续 同步	FactoryTalk View SE/ME
顺序管理器	X		X		N/A	连续 同步 循环 分叉	Studio5000 Logix Designer
FactoryTalk Batch	X			X	N/A	连续 同步 循环 分叉	FactoryTalk Batch

选择合适的解决方案

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特点	SequenceManager™	LBSM
Logix Designer	v28+	v18+
阶段结构	PhaseManager™	PhaseManager™/定制程序
阶段接口	下拉菜单	阶段/位逻辑
最大配方/部数/阶段	受限于内存	≤ 32
配比 /报告参数	无限制	≤ 4
配比公式	✓	✗
数据类型	多种(B/R/S/INT/DINT)	实数，二进制数
步骤结构	连续，同步，循环，分叉	连续，同步
配方设计/在线修改	SFC 类似/导入	HMI 组态/在线修改
FactoryTalk View ME	✗	v7+
FactoryTalk View SE	v8.1+	v7+
HMI	3 ActiveX	面板
报表	Event Client and Archiving Services/SSRS	Queue Processor Service/SSRS
未来FTBatch 集成	✓	✗

批次处理产品概述

选择正确的产品

批次处理应用工具包



批次应用工具包

概述

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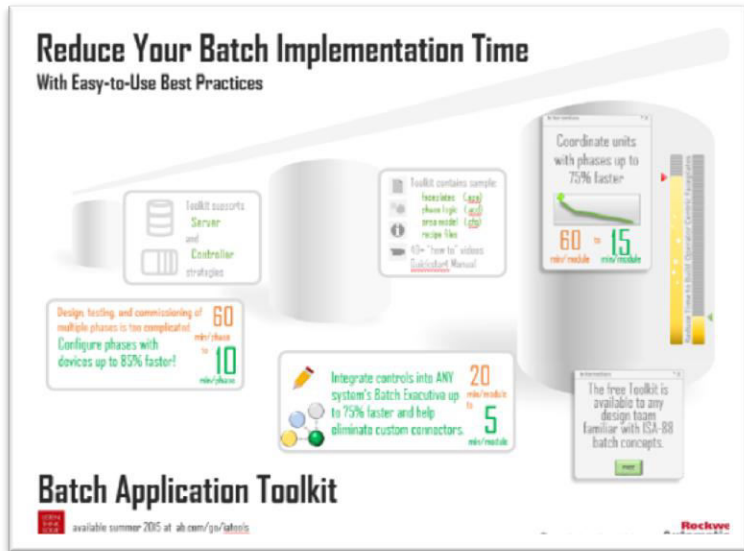
概述

提供文档,编码及人机界面组件以帮助批次应用开发

- 用作批次项目的开始点
- 免费下载

好处

- 减少设计工作量
- 提高编程和图形组态效率
- 减少部件测试工作
- 减少投运出错



观看介绍视频:

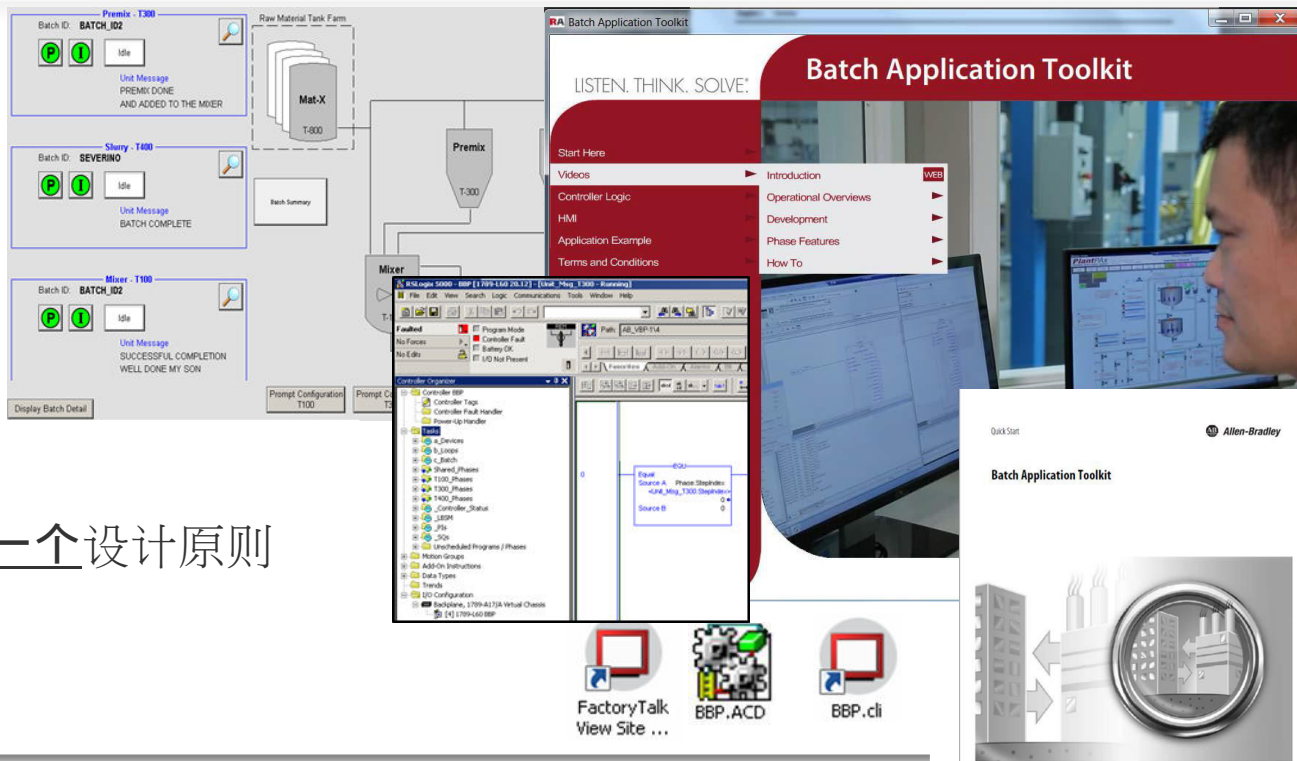


http://embed.vidyard.com/share/JC5W8qvpOGKDet5V_dCv8Q

批次应用工具包

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- 内容:
 - 设备阶段库
 - 支持子程序
 - HMI 部件
 - 过程单元例子
 - 文档
 - 45 详细的视频
 - 样板项目文件遵循一个设计原则来完成批次项目



简化的批次解决方案开发

减少设计工作量

- 减少编程和图形创建工作量,同时减少组件测试工作量

可靠而且可重复的解决方案

- 用可重复且事先确定的的方式实现ISA-88批次解决方案
- 包含代码库及人机界面对象库来帮助驱动一致性

经验积累的开发

- 通过利用已被实践验证的设计思想与最佳实践来提供指导
- 包括为操作员提供交互控制，并投运可用以批次管理软件或顺控器



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Systems

Accelerator Toolkits

Title & Description	Link
Batch Application Toolkit The Batch Application Toolkit is a collection of documentation, equipment phases, support routines, and associated HMI components that can assist you in the development of a Batch Solution using Integrated Architecture or the PlantPAx® distributed control system. It serves as a starting point to a batch project, and it demonstrates one chosen and specific batch-control philosophy that can be modified to meet your own specific needs or philosophy.	Download
Accelerator Toolkit Overview Video Learn how the Accelerator Toolkits listed below can provide you significant time savings when developing control systems.	Video [MP4]
CNC Machining Accelerator Toolkit The CNC Machining Accelerator Toolkit simplifies the integration between Rockwell Automation's Logix Control,	Download

Quick Start

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Batch Application Toolkit



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批次产品组合 – 下一步？

FactoryTalk Batch 版本13.0

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FactoryTalk[®] Batch

概述

- 操作员界面现代化并支持多种语言切换
- 集成SequenceManager™，单元级控制可在控制器或批次服务器中执行。
- 增加寻找功能使不同版本的配方更易编辑和管理
- 改善数据库管理工具

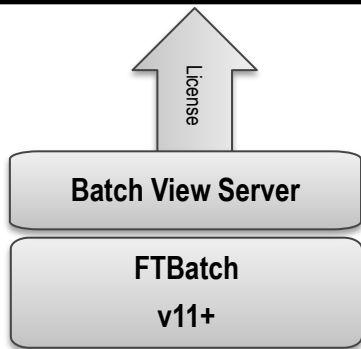
好处

- 更自然地支持移动设备确保合适的用户和分工有快速的响应
- 方便集成服务器与基于控制器的OEM独立系统
- 有效的配方管理以及不同应用的混合缩短产品入市时间
- 改善的数据完整性提高了报表和恢复作业的系统可用性

批次产品组合

FactoryTalk Batch View Server

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概述

- 新的网页服务器技术提供了与批次服务器的实时接口 (HTML5).
- 可伸缩图形可适合任何设备
- 与批次服务器直接连接
- 新的ViewSE用户控制和移动设备都访问单一源头

好处

- 确保快速响应以保证生产运行
- 可在现有客户(V11+)中现代化其HMI而无需购买新的许可
- 为更方便的生产升级提供现代化的架构

批次界面/移动界面

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批次提示

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安全

瘦客户端

快速的用户体验

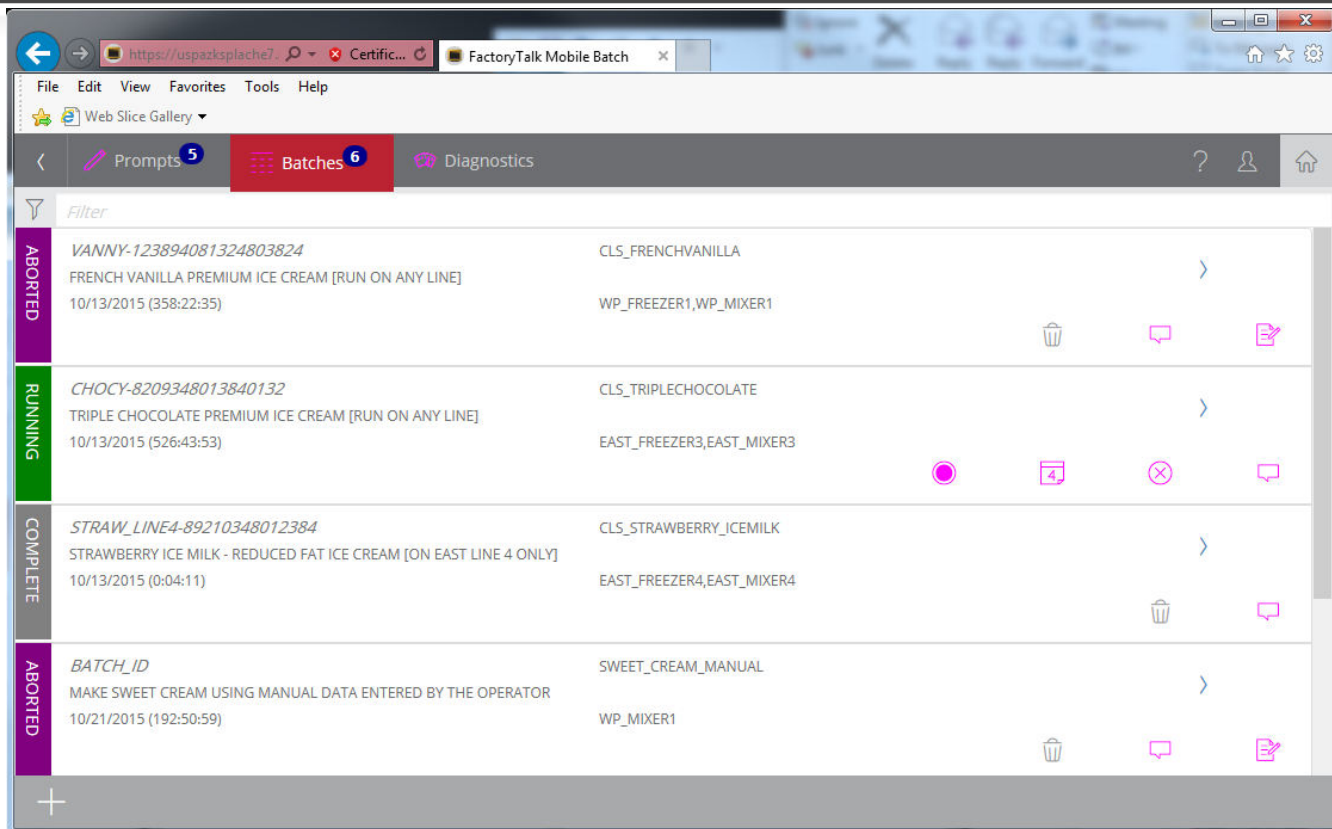
任何OS, 任何浏览器

可触控

Filter	Prompts
Sign for command Abort BATCH_ID	376:SWEET_CREAM_MANUAL-1 10/26/2015
Sign for command Abort BATCH_ID WP_MIXER1	374:SWEET_CREAM_MANUAL-1 Last Thursday at 1:42 PM
TEMP_SP chocy-8209348013840132 EAST_MIXER3 / EP_HEAT_M3	372:CLS_TRIPLECHOCOLATE\CLS_SWEETCREAM_UP:1\CLS_SWEETCREAM... 10/26/2015
HOLD_TIME chocy-8209348013840132 EAST_MIXER3 / EP_HEAT_M3	372:CLS_TRIPLECHOCOLATE\CLS_SWEETCREAM_UP:1\CLS_SWEETCREAM... 10/26/2015
Sign for command Abort VANNY-123894081324803824 WP_FREEZER1,WP_MIXER1 / WP_AGITATE_M1,WP_ADD_CREAM_M1,WP_HE...	371:CLS_FRENCHVANILLA-1 10/28/2015

批次列表

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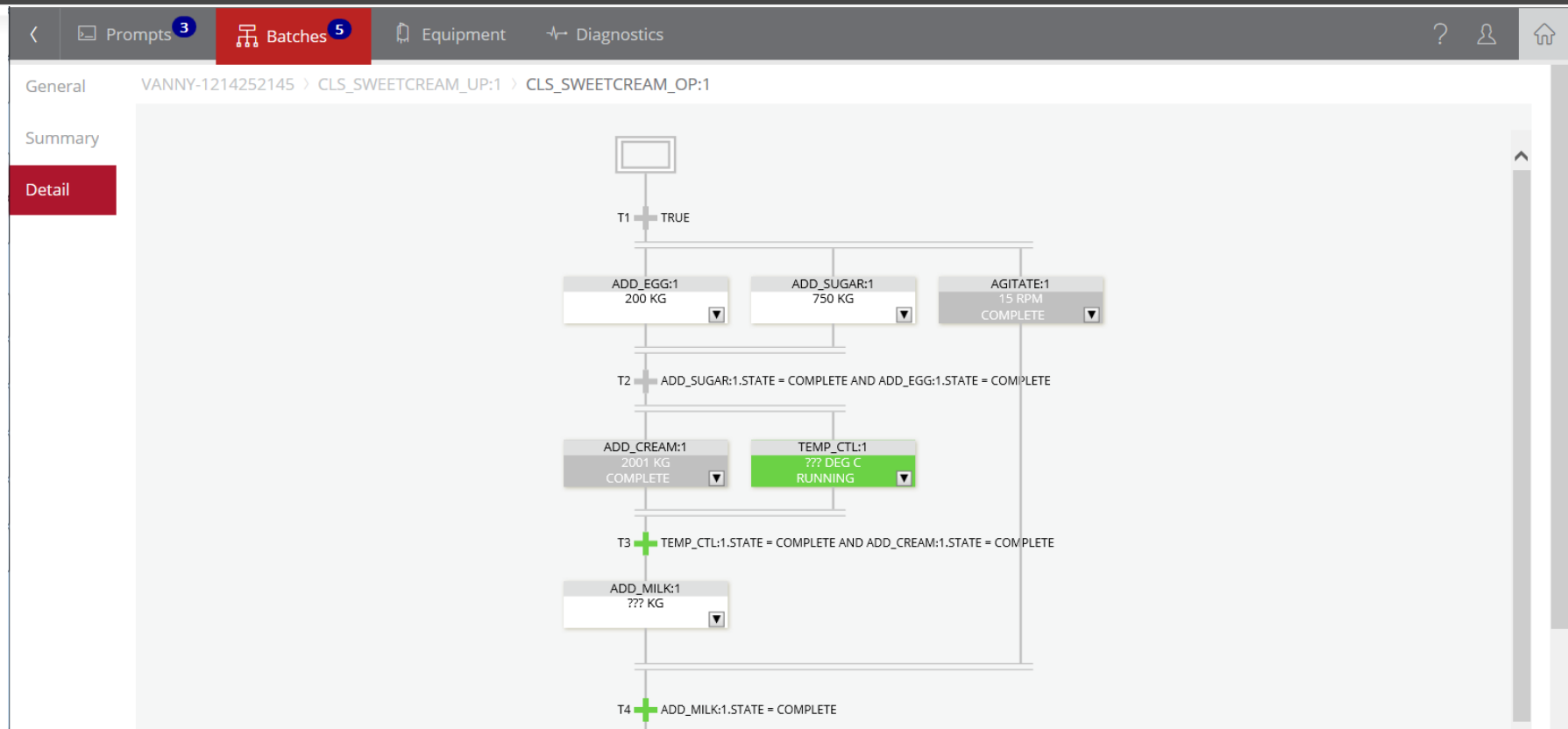


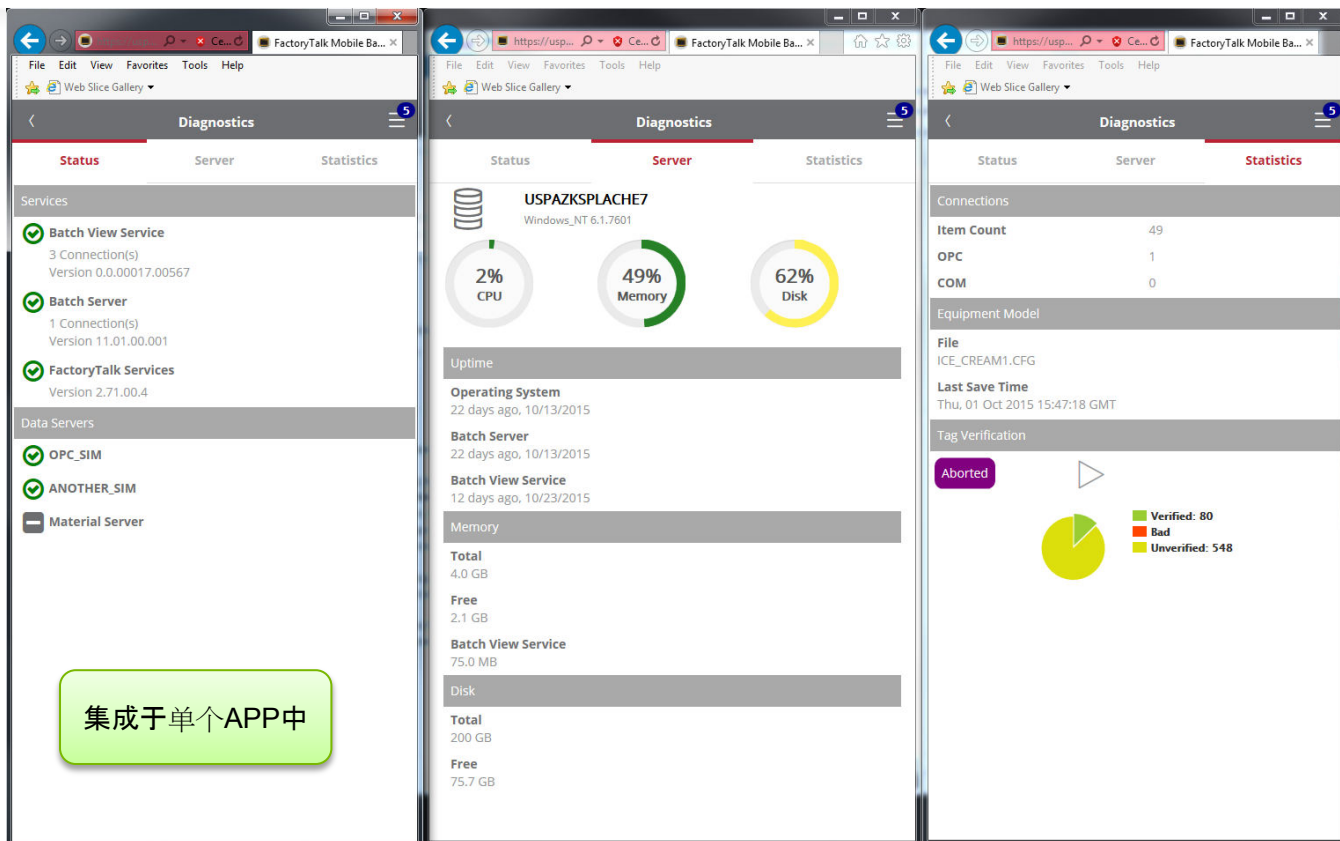
The screenshot shows a web browser window with the address bar displaying "https://uspa2k3plache7...". The browser has tabs for "FactoryTalk Mobile Batch" and "Certific...". The application interface includes a menu bar with "File", "Edit", "View", "Favorites", "Tools", and "Help". Below the menu bar is a "Web Slice Gallery" with a dropdown arrow. The main navigation bar features three tabs: "Prompts" (5), "Batches" (6), and "Diagnostics". The "Batches" tab is currently selected. Below the navigation bar is a "Filter" section with a funnel icon. The main content area displays a list of four batches, each with a status indicator on the left, a description, a date and time, and a list of equipment. The batches are: 1. "ABORTED" status, "VANNY-123894081324803824", "FRENCH VANILLA PREMIUM ICE CREAM [RUN ON ANY LINE]", "10/13/2015 (358:22:35)", equipment "CLS_FRENCHVANILLA" and "WP_FREEZER1,WP_MIXER1". 2. "RUNNING" status, "CHOCY-8209348013840132", "TRIPLE CHOCOLATE PREMIUM ICE CREAM [RUN ON ANY LINE]", "10/13/2015 (526:43:53)", equipment "CLS_TRIPLECHOCOLATE" and "EAST_FREEZER3,EAST_MIXER3". 3. "COMPLETE" status, "STRAW_LINE4-89210348012384", "STRAWBERRY ICE MILK - REDUCED FAT ICE CREAM [ON EAST LINE 4 ONLY]", "10/13/2015 (0:04:11)", equipment "CLS_STRAWBERRY_ICEMILK" and "EAST_FREEZER4,EAST_MIXER4". 4. "ABORTED" status, "BATCH_ID", "MAKE SWEET CREAM USING MANUAL DATA ENTERED BY THE OPERATOR", "10/21/2015 (192:50:59)", equipment "SWEET_CREAM_MANUAL" and "WP_MIXER1". Each batch entry has a set of icons on the right: a trash can, a speech bubble, and a document icon. A plus sign icon is located at the bottom left of the batch list.

Status	Batch ID	Description	Date/Time	Equipment
ABORTED	VANNY-123894081324803824	FRENCH VANILLA PREMIUM ICE CREAM [RUN ON ANY LINE]	10/13/2015 (358:22:35)	CLS_FRENCHVANILLA WP_FREEZER1,WP_MIXER1
RUNNING	CHOCY-8209348013840132	TRIPLE CHOCOLATE PREMIUM ICE CREAM [RUN ON ANY LINE]	10/13/2015 (526:43:53)	CLS_TRIPLECHOCOLATE EAST_FREEZER3,EAST_MIXER3
COMPLETE	STRAW_LINE4-89210348012384	STRAWBERRY ICE MILK - REDUCED FAT ICE CREAM [ON EAST LINE 4 ONLY]	10/13/2015 (0:04:11)	CLS_STRAWBERRY_ICEMILK EAST_FREEZER4,EAST_MIXER4
ABORTED	BATCH_ID	MAKE SWEET CREAM USING MANUAL DATA ENTERED BY THE OPERATOR	10/21/2015 (192:50:59)	SWEET_CREAM_MANUAL WP_MIXER1

批次SFC 视图

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本地化

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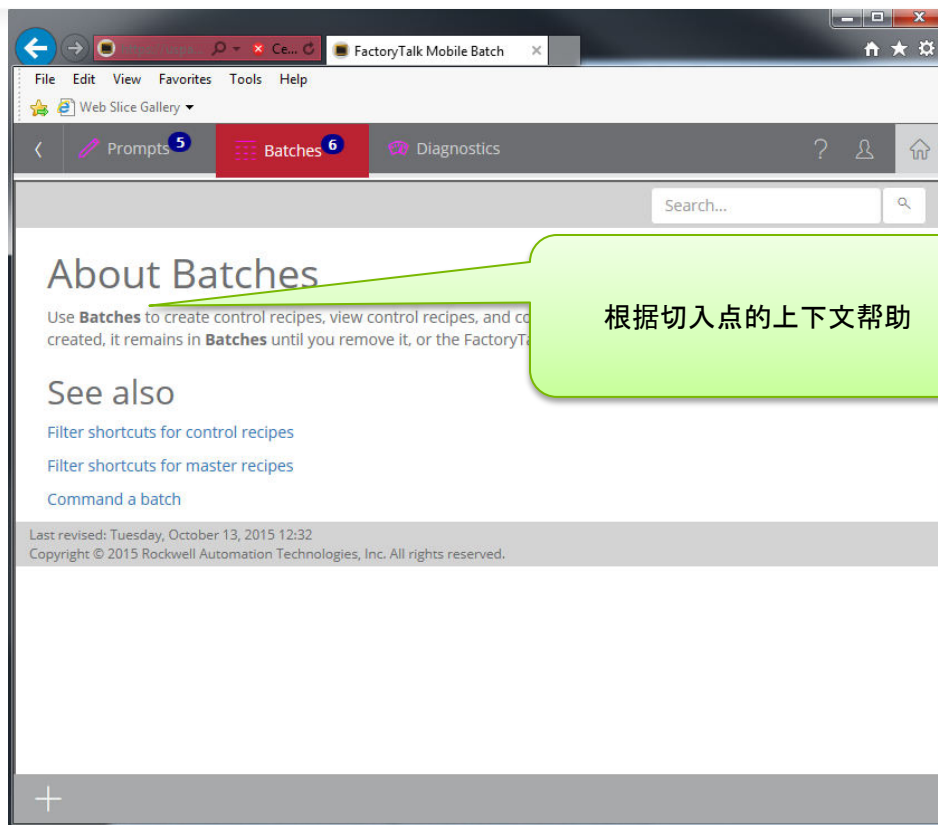
The image displays two screenshots of the FactoryTalk Mobile Batch application interface, illustrating localization options.

Left Screenshot (Diagnosis Screen):

- The interface shows a navigation bar with tabs: **Estado** (Status), **Avisos** (Alerts), **Lotes** (Lots), and **Diagnóstico** (Diagnosis).
- The **Diagnóstico** tab is active, displaying a list of services under the heading **Servicios Dependientes** (Dependent Services).
- The services listed are:
 - Batch View Service**: 3 Conexión(s) (Connections), Versión 0.0.00017.00567
 - Servicio Lote**: 1 Conexión(s), Versión 11.01.00.001
 - Servicios FactoryTalk**: Versión 2.71.00.4
- A green callout bubble points to **Servicio Lote** with the text **本地语言** (Local Language).

Right Screenshot (Profile Screen):

- The interface shows a navigation bar with tabs: **usuario** (user), **idioma** (language), and **settings**.
- The **idioma** tab is active, displaying a dropdown menu for language selection.
- The dropdown menu shows **Spanish** selected.
- A green callout bubble points to the dropdown menu with the text **运行语言选择** (Run Language Selection).



Reference Manual

PlantPAx
Process Automation System

PlantPAx Batch Design Considerations

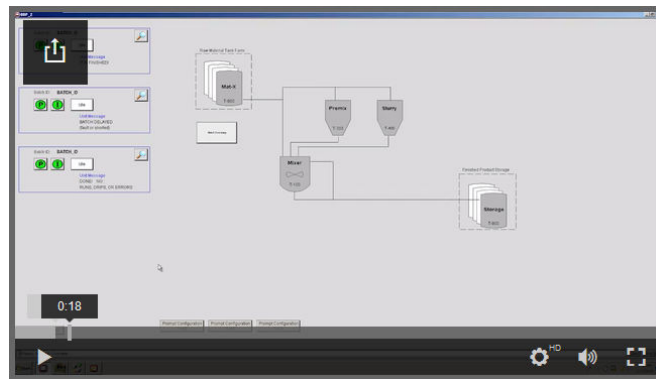


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http://literature.rockwellautomation.com/idc/groups/literature/documents/qs/iasimp-qs042_-en-p.pdf

<http://embed.vidyard.com/share/lkoKzrJCgs0LA08vS0X2zg>



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