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# Introduction

Prior to beginning the tutorial we suggest that you read the Pre-Implementation Guide located in the SI 5 User Manual. This will help you become familiar with many of the concepts covered in the Tutorial. This Tutorial covers just one of many of possible scenarios. All pricing (MSRP, Unit Cost, and Unit Price) is fictitious and should not be considered accurate.

# The Company

Global Vision, Ltd. is a system integration company operating in the middle residential market. Their typical project is less than \$100,000. They do primarily home automation with an emphasis on home theater systems.

Mike is the owner and decision maker. Under him are two sales people, Hans and Franz whose primary responsibility is to meet with potential clients, gather requirements, manage the proposal process and close deals. Dave is their lead installer and serves as project manager. Calvin and Hobbes are the installers. Laura is their designer and works primarily in Visio but dabbles with AutoCAD. Her primary responsibility is to assist the sales team with proposals and then to engineer and document closed projects. Marge is their bookkeeper and uses QuickBooks Premiere to manage their financials. They do not stock inventory for most products with the exception of wire, connectors, back boxes, etc. Any miscellaneous items that they do not show on a proposal are accounted for with a 3.5% Miscellaneous Parts percentage. This percentage is only applied to equipment and not to wire and back boxes installed during the rough-in process (they use a 1% factor for the "Rough-In" phase to account for connectors, wire ties, staples, etc.). They invoice most clients in a three step process according to the following percentages: 30% initial, and 50% upon ordering of primary equipment and 20% upon client approval. They collect 7% sale tax on both goods and services.

Job	Cost	Selling Price
Installers	\$30.00	\$75.00
Project Manager	\$40.00	\$100.00
Engineer	\$50.00	\$125.00

Mike and Marge met with the accountant and came up with the following labor rates.

#### 4 The Company

After analyzing timesheet data, it became clear that Dave was spending 100% and Laura 50% of their time on project related activities. Since there are two installers, .5 hrs of Dave's time and .25 hrs of Laura's time should be included for each install hour. These direct costs need to be included in the labor estimating process. Dave is responsible for training the client once the system is installed and Laura handles all of the programming tasks.

Mike, Laura and Dave spent several hours defining their business process. The results of their work are shown in "Appendix A: Global Vision Process Flow" on page 97.

# SI 5 Settings

Laura loaded the SI 5 software and Marge helped with the setup process. They opened the SI 5

Navigator and started with the setup tab.

## **Application Settings**

Setup tab -> Application Settings tab

😽 SI 5.5 Professional				
File View Tools Help				
Navigator Bar 🛛 🧧	Client: Bruce Dic			
Setup	$\frown$	n House (DICKINSONO	103)	
Run Application Setup Wizard	📶 Edit) 🚽 Save		į	
	Setup			
	Application Settings Appl	ication Project Settings Fo	) prmatting	
	Projects Folder:	C:\Documents and Settings	s\Test Master\My Documents\D-Tools SI5 Projects 👘 💡	
	Default Wire Length:		100 feet	
	Measurement Units:	US	☑ ₹	
	Price			
	Price Type A:	A		
	Price Type B:	В		
	Price Type C:	С		
Start Tax				
🚮 Manage Data	Tax Code:	Standard 🗸	1	
Clients and Contacts	Sales Tax Rate (%):	7.0000		
	Labor Sales Tax Rate (%):	7.0000		
Projects	Staff Types and Memb	ers		
Reports				
Orders and Accounting			\$	
- Crhadulina	B Designer B Project Manager		2	
Scheduling	Other			
Setup			4	
*				
A source of the second se	and the second s	and a strength of the second second	I a president and the second	

#### 2 SI 5 Settings

They setup their Company Information with logo, Misc. Parts Factor and Tax information.

😽 SI 5.5 Professional					_ 2	×
File View Tools	Help					
Navigator Bar		Client: Bruce Dic			Not Checked	Dut
Setup	<b>.</b>	Project: Dickinso	n House (DICKINSON003)		<u>Check Out</u> Check	In
Run Application	Setup	t 🛃 Save cation Settings App	lication Project Settings Formatting			
	E	Company Information				^
		Company Name:	Global Vision, Ltd.			
		Address1:	1313 Mockingbird Lane			
		Address2:			00	
		City:	Liverpool			
		State:	NE	Postal Code: 90210		
		Country:				
		Phone:	555.555.1234			
		Fax	555.555.4321		<b>₹ĽШИ</b> LTD	
🐴 Start		Email:	info@globalvisionltd.com		Derman	
🛃 Manage Data			Do not sync company information		Browse	
<b>2</b>		Project				
🔒 Clients and Cor	lacts	Projects Folder:	C:\Documents and Settings\Test Master\}	ly Documents\D-Tools SI5 Projects	Browse	
2 Projects		Default Wire Length:	100 feet			
Reports		- Measurement Units:	The second secon			
Orders and Acc	ounting	Price				
Scheduling		Price Type A:	A		Equipment +/- (%): 0.00	
Setup		Price Type B:	В		Misc Parts (%): 3.50	
() secup	*	Price Type C:	C			~
						Cesei
	- Tax					
	_					
	Ta	x Code: St	andard 🗸			
	Sales Tax R	ate (%):	7.0000			
	Labor Sales Tax R	ate (%):	7.0000			

Scrolling down in list you see the list of project statuses. Project Statuses are an internal way of communicating where each Project stands. They have determined that these statuses best represent their current business process.

😽 SI 5.5 Professional		_ 8 🛛
File View Tools Help		
Navigator Bar 📮	🔪 🧨 Client: Bruce Dickinson	Not Checked Out
Setup	Project: Dickinson House (DICKINSON003)	<u>Check Out</u> Check In
Run Application Setup Wizard	Edit Save Setup Application Settings Application Project Settings Formatting Staff Types and Members Seles Rep Hanz Hanz Hanz Hanz Designer Laura Designer Designer Designer Dave Designer	
Start		
🛃 Manage Data	Project Statuses	
Clients and Contacts		
	O1 - Discovery	
Projects	02 - Estimating	
👔 Reports	03 - Project On Hold	
Orders and Accounting	04 - Proposal Submitted 05 - Proposal Rejected	
Scheduling	06 - Approved	×
🔗 Setup *	Project Custom Property Name Settings Property Position Property Display Name	
۵		

4 SI 5 Settings

# **Application Project Settings**

Setup tab->Application Project Settings tab

### Phases

Then they setup their labor information for each project phase. As noted above, they do not add a Misc. Parts % for items sold in the Rough-In phase. For more information on Misc Parts % as well as Equipment %, see the SI 5 User's Guide.



## **Contract Percentages**

They use the following contract percentages for the majority of their projects:

Contract Percentages	
· · · · · · · · · · · · · · · · · · ·	
Payment Type	Billing Percentage (100.00%)
Initial Deposit	30.00
Progress Payment	50.00
Final	20.00

## Formatting

Setup tab -> Formatting tab

SI 5.5 Professional			_ a 🔀	
File View Tools Help				
Navigator Bar	📮 💉 Client: Bruce Dic	inson	Not Checked Out	
Setup		1 House (DICKINSON003)	<u>Check Out</u> Check In	
Bun Application Setup Wizard	n Application Setup Wizard Setup Application Settings Application Project Settings Formatting Component ID Format			
		Value	Length	
	Format Type	Value Type	3	
	*			
🐴 Start				
🚮 Manage Data	Format Type	Value	Length	
Clients and Contacts	Field	Company Name	5	
Projects	*			
Reports				
Orders and Accounting				
Scheduling				
ි Setup	<b>»</b>			
S				

They chose the following formats for their Component ID and Project ID:

### Work Order Settings

They have setup both Calvin and Hobbes as "resources" for Business Manager. Resources are assigned to Work Orders. They created them as Individuals and also as a Group for when they are sent out to jobs together.



#### 6 SI 5 Settings

### **Phase Settings**

GVL wants to improve their ability to accurately forecast labor on proposals. They use QuickBooks to track project timesheets and job cost information. Mike and Marge met with the accountant to determine fully burdened labor rates for the staff. They were particularly interested in direct labor costs. These are cost that are directly associated with the delivery of a project.

### Database

They spent several days setting up their SI 5 database. Some examples of how they accomplished this are shown here:

Downloading data: <u>http://www.screencast.com/t/D4qYM0hGlo</u>

Editing Data: http://www.screencast.com/t/XQIT17CH8N

Creating a Package: <u>http://www.screencast.com/t/iZ0BHFiC\_r</u>

## **Discovery with Client**

The initial discovery with the client, the MacGowans, went as follows. They are looking for a simple home theater option. They entertain on their covered porch frequently so they would like audio there as well. Their budget is right around \$25,000. They bought the house new five years ago and believe that they can obtain the AutoCAD file of the floor plan from the builder. After the initial discovery, Franz made the initial sketch of the systems that only he and one other person can read:



Not being particularly skilled at drawing, Franz asked Laura to make a better sketch of the systems:



Work now begins on the proposal by starting a Project in SI 5.

# **Creating the Project**

Franz launches SI 5 and is prompted to login:

D-Tools SI 5.5   Login			
🔝 Pleas	e Sign In		
Username:	Franz		
Password:	XXX		
Server:	XP-9		
Port:	9000_		
	Sign In Cancel		

The SI 5 Navigator opens and the Start tab displays. Click the "Create a new project" link.



The ten step wizard for creating a new SI 5 Project will open to step one. He proceeds to fill in information for each of the ten steps. He wisely consults the "Creating an SI 5 Project" section of the SI 5 User's Guide.

## Step 1: Project Name and Staff Assignments

🔧 New Project Wizard	🕂 🗗 🔀				
Create a New Project					
This wizard will walk you through the steps of creating a new pro	ject				
Step 1: Give the project a name and assign a project number. If generated for you.	f you leave the project number blank, one will be automatically				
Proiect Header Client *	Status				
The MacGowans 🗸	02 - Estimating				
Project Name *	Owner				
MacGowan Home	×				
Project Number					
MACGOWAN-001	* (Required)				
Project Contact and Staff Name	Sales Rep				
Shane MacGowan	Franz 💌				
Title	Designer				
Wild Rover	Laura 💌				
Phone	Project Manager				
555.555.2145	Dave 💌				
Email	Other				
shaneymac@pm.com	×				
Cancel	Previous Next Save				

# Step 2: Site Address

诸 Nev	v Project Wizard				• 🗉 🔀
Crea	ate a New Project				
This v	vizard will walk you through the st	eps of creating a new proje	ct		
Step	2: Enter the Projects Site Address	:			
~ Site	Address				
	Address 1				
	123 Clover Lane				
	Address 2				
	City				
	New Dublin				
	State	Postal Code			
	GA	30141			
	Country				
	Phone	Fax			
	555.555.2147				
Ca	ncel			Previous Next	Save

# Step 3: Billing Address

St New Project Wizard	• 🖬 🔀
Create a New Project	
This wizard will walk you through the steps of creating a new project	
Step 3: Enter the Projects Billing Address	
- Billing Address	
Name	
Rose MacGowan	
Address 1	
123 Clover Lane	
Address 2	
City	
New Dublin	
State Postal Code	
GA 30141	
Country	
Cancel Previous Next	Save

# Step 4: Project Contacts

😽 New Project Wizard	• 🖻 🗙				
Create a New Project					
This wizard will walk you through the steps of creating a	new project				
Step 4: Enter the contact information for people associat	ted with this project.				
🖬 🔟					
Irene Drawthings					
Name:	Irene Drawthings				
Туре:	Architect  Phone: 555.555.4758				
Title:	Associate Email: id@id.com				
Company					
Name:	ABC Designs				
Address:	456 Protractor Drive				
City:	Vector State: GA				
Postal Code:	30125 Country:				
Phone:	555.555.4758 Fax: 555.555.4759				
Cancel	Previous Next Save				

# Step 5: Scope Of Work

🔧 New Project Wizard	• 6	×
Create a New Project		
This wizard will walk you through the steps of creating a new project		
Step 5: Enter the projects Scope of Work.		
🍄 🔥 💣		
5.1 surround system w/ 42" display. The three front speakers and sub are in-wall, the two rear are on-wall. The sys controlled via a touch screen eliminating the need for separate controllers for each component. All components wi housed in a pull-out rack that will be installed in the existing cabinetry. Two in-ceiling speakers will provide sound to area of the covered porch.	ill be	
		<u>×</u>
Cancel Previous Next	Save	

# Step 6: Location Types

🔧 New Project Wizard	• 🖪 🔀
Create a New Project	
This wizard will walk you through the steps of creating a new project	
Step 6: Define the location types for this project.	
Name	
Room	
Cancel Previous Next S	Save

# Step 7: Define Locations

😽 New Project Wizard	🔹 🖬 🔀						
Create a New Project							
This wizard will walk you through the steps of creating a new project							
Step 7: Define the locations for this project.							
🛃 Add New Location 💌 📶 🔛 🕋 🔛 🙆 😼							
Game Room Location							
Covered Porch	Comp ID						
	COVER						
	Name						
	Covered Porch						
	Description						
	Description						
Cancel	evious Next Save						

## Step 8: Define Zones

See the "SI 5 User Guide" for ideas on how to use Zones. In this case Zones are used to define systems or subsystems.

75	New Pro	ject Wiza	ard				• 🖪 🔀		
C	Create a New Project								
Т	This wizard will walk you through the steps of creating a new project								
S	<b>tep 8</b> : De	fine the Zo	ones for this project.						
		1 1	\$ <b>\$</b>						
ľ	Name				Description				
	Audio	/Video Sy	stem						
5	K Contr	ol System		~					
÷	ŧ								
	Cancel					Previous Next	Save		

## Step 9: Contract Percentages

It was decided that since this is a small project, they are going to bill for it as 50% Initial payment and the remainder upon completions of work.

😼 N	🖥 New Project Wizard 💽 🖸 🔀							
Cr	Create a New Project							
Thi	This wizard will walk you through the steps of creating a new project							
Ste	Step 9: Modify the contract percentages.							
R	X 🛛							
Pa	yment Type	Billing Percentage (100.00%)		Billing Date				
►	Initial Deposit	50.00		//				
	Final	50.00		//				
*								
	Cancel		Previous	Next Save				

## **Step 10: Custom Properties**

Currently they do not plan to use Custom Project Properties

📲 New Project Wizard		• 🖬 🗙					
Create a New Proj	ject						
This wizard will walk you through the steps of creating a new project							
Step 10:Set the project c	ustom property values and save your new project file.						
Custom Property	Custom Property Value						
CustomProperty1:							
CustomProperty2:							
CustomProperty3:							
CustomProperty4:							
CustomProperty5:							
CustomProperty6:							
CustomProperty7:							
CustomProperty8:							
CustomProperty9:							
CustomProperty10:							
Cancel	Previous Next	Save					

When he finishes entering the information, he clicks [Save].

Save New Projec	t File		_	_	_	? 🔀
Save in:	🚞 MacGowan H	łome	~	G 🦻 🖻	۶ 👥 ۲	
My Recent Documents						
Desktop						
My Documents						
y My Computer						
<b></b>	File name:	MacGowan Home		•	-	Save
My Network	Save as type:	D-Tools Project files (*	.dtl)	•	-	Cancel

The default save location for a project in SI 5 is C:\Documents and Settings\*username*\My Documents\D-Tools SI5 Projects\*Client Name*\*Project Name* for Windows XP users. For Vista users, the default path is C:\Users\*username*\Documents\D-Tools SI 5 Projects\ *Client Name*\*Project Name*.

# **Creating the Proposal**

Franz right-clicks the project and selects "Open Project in SI Text":

🔧 SI 5.5 Professional							
File View Tools Help							
Navigator Bar 🛛 🕂 🕂	🔪 🖉 Client: The MacGowans						
Projects	Project: MacGowan Home (N	ACGOWAN-001)					
Spen this project in SIText	📃 Project Grid 🔛 Selected Project	t Details					
View project information Show: Projects changed in last week 💌 😰							
Check In this project	- Brojects						
Undo Check Out     Drag a column header here to group by that column.							
Create a new project	I Name マ - Number	Open Project in SI Text N V Client					
Copy this project	Dickinson House DICKINSONO	Open in Visio					
Move this Project	Dio Home 0001	Open in AutoCAD					
Create a new revision of this project	MacGowan Hom MACGOWAN	The indecidity					
😼 Import a project		New Project Ctrl+N					
🗎 Add a file to this project		Copy Project					
🔛 Create new Visio drawing for this project	Part 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Move Project					
and a service of the	Ward a stranger and the second dates	and a second and a second and a second and					

The project opens:

	sstTest HasterWy Documents'D-Tools SI5 Projects\The MacGowansWacGowan Home:WacGowan Home.dtl	_ 2 🔀
File D-Tools View Help		
My Products	Project Data <u>M</u> atrix	
🗹 🚠 V 🖬		
Products     Packages	S Category Manufacturer Model 3 Unit Price Install Price Location Z	one 🔬
. Packages		
_		
_		

Since this is a retro-fit, he needs to make an adjustment to the labor hours since all of the Rough-In wire and cable in their database has the labor set based on new construction. He selects D-Tools→Options then selects "Rough-In" from the dropdown. He adjusts the difficulty factor from 100% to 150% which means that he is charging 50% more hours than is associated with each in the Product database.

nase: Rough-In		~							Add Phase
Labor:									Save Phase
🗌 Display Marku			_		for this phase				
	Cost/Hr	Price/Hr	Margin	Factor	Difficulty	Time Multiplier	Factored Cost/Hr	Factored Price/Hr	Save Default
Base Labor	\$30.00	\$75.00	60.00%	100.00%	150.00%	150.00%	\$45.00	\$112.50	Restore Defaul
▶ Misc Labor	\$0.00	\$0.00	0.00%	0.00%	150.00%	0.00%	\$0.00	\$0.00	
Management Labor	\$40.00	\$100.00	60.00%	50.00%	100.00%	<u>50.00%</u>	\$20.00	\$50.00	
Design Labor	\$50.00	\$125.00	60.00%	25.00%	100.00%	<u>25.00%</u>	\$12.50	\$31.25	
Factored Totals			60.00%			225.00%	\$77.50	\$193.75	
Equipment: ☑ Override project defaul Misc. Parts :	ts for this ph	ase	Equipmer	at +/- · []	0.00%				

After that, Franz uses the [+] next to "Products" to expand the list and notices that the hierarchy of how the Products list begins with Category.



His preference it to have the Products list by Manufacturer $\rightarrow$ Model Number. He clicks the button and makes the adjustment:

Manage your Product Explorer							
You can rearrange your Product Explorer by selecting different levels.							
Level 1 Sort: Manufacturer  Level 2 Sort: (None) Level 3 Sort: (None)	⊡- Manufacturer Model						
Level 4 Sort: Model							
	Reset OK Cancel						

He then begins adding Products to the Project DataMatrix (PDM) by dragging and dropping:

💐 D-Tools SI Text - C:'Documents	s and Settings\senos\My Documents\D-Tools P
File D-Tools View Help	
My Products	Project DataMatrix
🛃 🛣 🔽 🛃	<u> </u>
E Clearone	🔨 🕨 Manufacturer 🧼
庄 🔲 Clockaudio	
⊡ <mark>[]</mark> Crestron BB-3000L BB-4L C2N-DAP8RC	Left click with your mouse and then drag and drop
C2N-DBF12W C2N-HBLOCK C2N-HBLOCK CNAMPX-16X60	
CNAMPX-7X200 CNHBLOCK CNRFGWA	
CNX-BIPAD8	

He gets a message stating that the Unit Price is missing:

Manufact	urer:Crestron Model: CNHBLOCK
2	Warning. This equipment has a zero or blank value in following fields: UnitCost Unit Price
	Would you like to correct?
	Yes No

He chooses **[Yes]** and the SI Product Properties form opens with the Price tab selectd. He clicks the Price tab and, after verifying the pricing with Marge, makes the adjustment:

		Specifications   2	<u>secessones   visual</u>	izations <u>C</u> ustom Pro	pherces		
Price							
	Ignore Cost, Pric	e					
4SF	RP:	400.00	<u>pdate price</u> Installed	l Price:	505.05	View	Options (
	Price Type	Unit Cost	Margin	Markup	Unit Price	Default	
►	Retail	200.00	50.00%	100.00%	400.00	V	
	Builder	0.00	0.00%	0.00%	0.00		
	Custom	0.00	0.00%	0.00%	0.00		

While inside of the Properties, he decides to assign the Location and Zone for the product. To do this he clicks the Description tab and then selects the proper Location and Zone. When finished he clicks [Save].

escription Price Specifications Accessories	Custom Properties
Product Description:	Location:
Rack Mountable Multitype Cresnet Distribution Block Client Description:	_Unassigned Game Room Covered Porch
Rack Mountable Multitype Cresnet Distribution Block NOTE - All Pricing is for Demonstration and Training Purposes Only. Do Not Use On a Client Proposal.	
	Zone: Control System

He then continues to add Products to the PDM by dragging and dropping until he has all of the Products that he feels completes the Project. When he dragged wire to the PDM, he was prompted to select a Head End, wire length, and a terminal start/end:

Assign Head End		×
Head End		
Phone Phone Service Rear PTV Roof DSS Room Speaker Room TV Security Security HE Spa VC		New Edit Delete
Subwoofer Telecom HE Upper Deck Video Audio HE	≡	
<		
Wire		
Wire length:	100 Update defa	ault wire length
Wire terminal start:	SPK	*
Wire terminal end:	RCA	~
	ОК	Cancel

When Franz is finished, the proposal looks like this:

-Tools View Help								
roducts		t Data <u>M</u> atrix						
* A t	1	📝 🗙 🛃 🔽 🛃 🔳	1 ᢓ↓ 📝 -	🎒 🗷 🕺 🛃				
Products		Manufacturer	Model	Category	ComponentID	Room	Install Price Zone	
🖸 👖 Active Thermal Management 🛛 🦷	► -	Covered Porch (Installed P	rice: \$2,803.92	2]				
🗄 📋 Amx		🖃 Audio Video System (Ins						
⊡ 🚺 Belkin		Liberty Cable	14-2C-GRY	Wire And Cable	AUD-010	Covered Porch	\$86.05 Audio Video System	
E-U Chief		Liberty Cable	14-2C-GRY	Wire And Cable	AUD-011	Covered Porch	\$86.05 Audio Video System	
E		SpeakerCraft	AIM7 TWO	Speakers	CEI-002	Covered Porch	\$572.26 Audio Video System	
E- Clockaddio		SpeakerCraft	AIM7 TWO	Speakers	CEI-001	Covered Porch	\$572.26 Audio Video System	
⊡ Da-lite		- Control System (Installed	Price: \$1,487	.30)				
⊡ D-Tools, Inc.		Crestron	CT-1000	Control Systems	TOU-004	Covered Porch	\$1,487.30 Control System	
E Extron	-	Game Room (Installed Pric	e: \$26,400.72)					
E 🚺 Ge Security		– Audio Video System (Ins						
Generic		Active Thermal Management	COOL-VENT I	Hvac	VEN-001	Game Room	\$326.35 Audio Video System	
E- Global Vision Ltd		Chief	MTR-V	Equipment Racks	MOU-001	Game Room	\$208.43 Audio Video System	
Gyration		Global Vision Ltd	24810	Wire And Cable	AUD-003	Game Room	\$0.00 Audio Video System	
E Hubbell		Global Vision Ltd	24810	Wire And Cable	AUD-002	Game Room	\$0.00 Audio Video System	
		Global Vision Ltd	24810	Wire And Cable	AUD-001	Game Room	\$0.00 Audio Video System	
		Global Vision Ltd	POWER CABLE	Wire And Cable	P0W-006	Game Room	\$0.00 Audio Video System	
⊡ III Klipsch		Global Vision Ltd	POWER CABLE	Wire And Cable	P0W-003	Game Room	\$0.00 Audio Video System	
E- 🚺 Liberty Cable		Global Vision Ltd	POWER CABLE	Wire And Cable	P0W-005	Game Room	\$0.00 Audio Video System	
🛛 📋 Marantz		Global Vision Ltd	POWER CABLE	Wire And Cable	P0W-002	Game Room	\$0.00 Audio Video System	
Middle Atlantic Products		Global Vision Ltd		Wire And Cable	P0W-007	Game Room	\$0.00 Audio Video System	
E Nec E Netgear		Global Vision Ltd	POWER CABLE		POW-004	Game Room	\$0.00 Audio Video System	
⊡…II Panamax		Liberty Cable	14-2C-GRY	Wire And Cable	AUD-009	Game Room	\$86.05 Audio Video System	
Panasonic		Liberty Cable	14-2C-GRY	Wire And Cable	AUD-003	Game Room	\$86.05 Audio Video System	
Powerware			14-2C-GRY	Wire And Cable	AUD-012 AUD-005	Game Room		
- T Premiere		Liberty Cable					\$86.05 Audio Video System	
⊡ 🗂 QSC		Liberty Cable	14-2C-GRY	Wire And Cable	AUD-008	Game Room	\$86.05 Audio Video System	
B 🗍 RDL		Liberty Cable	14-2C-GRY	Wire And Cable	AUD-007	Game Room	\$86.05 Audio Video System	
🗉 📙 Request Multimedia		Liberty Cable	14-2C-GRY	Wire And Cable	AUD-006	Game Room	\$86.05 Audio Video System	
B. [] Runco		Marantz	SR7001	Receivers	SUR-002	Game Room	\$1,722.70 Audio Video System	
⊡… 🔲 Scientific Atlanta ⊡… 🔲 Sennheiser		Middle Atlantic Products	-C	Accessories	KIT-002	Game Room	\$63.34 Audio Video System	
∎∎ Smart Technologies		Middle Atlantic Products	HW100	Equipment Racks	KIT-003	Game Room	\$68.56 Audio Video System	

Although he has been saving frequently (that just might be sage advice), he clicks is one more time then closes the Project by selecting File->Exit:

📲 D	-Tools Si	Text - C:\Docu	mei
File	D-Tools	View Help	7
N	ew		
0	pen	7 🥑	1
Se	ave	ducts	-5
E:	XIC N I	Active Thermal M	an
111	- <del></del>	Amx	1
	÷	Belkin	- 41
	÷ 🚺	Chief	- 21
	÷	Clearone	1.1
L.J.J.	Avia	Slectron dia An	A.

The project displays in the project grid. The project is still checked out to Franz. This is indicated in the **Checked Out To** column.

😽 SI 5.5 Professional	
File View Tools Help	2
Navigator Bar 🛛 🤤	Client: The MacGowans
Projects	Project: MacGowan Home (MACGOWAN-001)
🔫 Open this project in SIText	Project Grid 🔛 Selected Project Details
View project information	Show: Projects changed in last week 🔹 💈
🗊 Check In this project	Projects
🇐 Undo Check Out	Drag a column header here to group by that column.
🎦 Create a new project	🖅 Name 🛛 🗸 Number 🖓 🖌 Status 🖓 Checked Out To 🖓 Client
Copy this project	Dickinson House DICKINSON003 01 - Discovery Bruce Dick
🗎 Move this Project	Dio Home 0001 01 · Discovery Ronnie Jan
Create a new revision of this project	MacGowan Hom MACGOWAN-00 02 - Estimating Franz [XP-9]
😼 Import a project	
🗎 Add a file to this project	
Alter and Alter a second and a second	

In order to allow other users access to the project, Franz selects the project right-clicks and selects "Check In" (he could have also used the "Check In this project" link):

😽 SI 5.5 Professional		
File View Tools Help		
Navigator Bar 🛛 🕹	V Client: The MacGowans	i i i i i i i i i i i i i i i i i i i
Projects	Project: MacGowan Home (MACGOWAN-001)	
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Copy this project	Dickinson House DICKINSON003 Open in Visio	Bruce Dickinson SI5
🐴 Move this Project	Dio Home 0001 Open in AutoCAD +	Ronnie James Di Dio 🖡
📸 Create a new revision of this project	MacGowan Hom MACGOWAN-00	The MacGowans Ma
🔕 Import a project	New Project Ctrl+N	3
Add a file to this project	Copy Project	
Create new Visio drawing for this project	Move Project	
🖄 Create new AutoCAD drawing for this 🕬	Rename Project File	1
Start	😰 Refresh Project F5	2
	Get Latest Project Files	( €
🔣 Manage Data	1 Check Out	3
🔒 Clients and Contacts	Check In	5
Projects	Undo Check Out Force Undo Check in your changes to t	he server.
Reports	Create Revision	المستمرينا

## Line and Elevation Drawings

Laura then launches SI 5 on her machine and is prompted to login. She has been assigned a license of SI 5 Standard. She clicks the Project tab then selects the project in the Projects section of the screen and clicks "Check Out this project" so that she has "custody" of it.

🔧 SI 5.5 Professional	
File View Tools Help	
Navigator Bar 🛛 🦊	Client: The MacGowans
Projects	Project: MacGowan Home (MACGOWAN-001)
🔫 Open this project in SIText	Project Grid Kelected Project Details
View project information	Show: Projects changed in last week 🔹 💈
Get latest version of all files for this proje	Projects
f Check Out this project	Drag a column header here to group by that column.
🚹 Create a new project	PName 🗸 Number 🗸 Status 🗸 Checked Out To
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She selects the project and then right-clicks and selects Open in Visio->New Drawing:

😤 SI 5.5 Professional			
File View Tools Help			
Navigator Bar 🛛 🦊	Client: The MacGowans		Ch
Projects	Project: MacGowan Home (MACGOWAN-001)		Check,/
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😒 Import a project		New Project Ctrl+N	
Add a file to this project		Copy Project	
🚳 Create new Visio drawing for this project		Move Project	1 3
🖄 Create new AutoCAD drawing for this 🕬		Rename Project File	1 2
many and a second and a second and have	and the second sec		أكالحصي وتعريب سلوين والاستقرار المتعاديان

She selects their custom template and adds a name to the drawing. The naming convention they use for all project files is to add the Project Number to the file name.

New Visio Drawing 🛛 🖪 🔀
Select a drawing template: D-Tools SI5 11 x 17 Template.vst D-Tools SI5 24 x 36 Template.vst D-Tools SI5 42 X 30 Template.vst D-Tools SI5 8.5 X 11 Template.vst D-Tools SI5 A1 Template.vst D-Tools SI5 A2 Template.vst D-Tools SI5 A3 Template.vst GVL 24 x 36 Template.vst
Drawing name: MACGOWAN-001.vsd
Ok Cancel

The file that was created does not display on the **Project Grid** tab but can be viewed via the **Selected Project Details** tab. She selects the project right-clicks and then selects Open in Visio->MACGOWAN-001.vsd. She could have also opened the file via the **Selected Project Details** tab:

SI 5.5 Professional		
File View Tools Help		
Navigator Bar 🛛 📮	Client: The MacGowans	Checked Out to
Projects	Project: MacGowan Home (MACGOWAN-001)	Check Out Check
🗠 Open this project in SIText	Project Grid 😢 Selected Project Details	
View project information	Show: Projects changed in last week 🔹 💈	9
Check In this project	Projects -	
🍤 Undo Check Out	Drag a column header here to group by that column.	
🛅 Create a new project	🚰 Name 🛛 🕶 Number 🏹 🖌 Status 🖓 🕶 Checked Out To 🖓 🗸 Client	Open Project in SI Text
Copy this project	Dickinson House DICKINSON003 01 - Discovery Bruce Dickir	Open in Visio 🔸 🦉 New Drawing
Move this Project	Dio Home 0001 01 · Discovery Ronnie Jam	Open in AutoCAD MACGOWAN-001.vsd
Create a new revision of this project	▶ MacGowan Hom MACGOWAN-00 02 · Estimating laura [XP-9] The MacGo	View Project Information
🐿 Import a project		New Project Ctrl+N
Add a file to this project		Copy Project
Create new Visio drawing for this project		Move Project
🗎 Create new AutoCAD drawing for this 🕬		Rename Project File
Start		Refresh Project F5
		Get Latest Project Files
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The Project that Franz created is now opened as a Visio Project file:



Note: the interface windows docked along the left side of the screen and the toolbars that are displayed will vary from machine to machine depending on changes the user

has made to the interface. If you do not see an interface window mentioned in this tutorial you can display them by Selecting D-Tools  $\rightarrow$  View:



Laura then clicks the Line Diagram tab in order to create a flow diagram of the Game Room system based off the sketches made earlier. The first Product she drags from the PDM to the drawing page is the plasma:

🔣 MACGOWAN-00	01.vsd - Microsoft Visio	_								
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The default shape for this page type uses the .jpg image that can be associated with products. The Visio symbol next to the product in the PDM indicates that the product is on the page:

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She continues dragging the Products to the page that she wants to show in this view:



Because this is a Line page type, she can resize these shapes by dragging the selection handles:



She then uses the Connector Tool in Visio to make the connections between products:





Tip: The cursor displays like thisImage: when you are using the Connector Tool.When you move the cursor over a Connection Point on a shape, the point turns red:



OW BRONZE SURROUND-BASIC

When the point turns red, left mouse click and hold, then move the cursor to a connection point on another shape until it turns red then release:



You can use the green handles on the line to reposition the line as desired:



To change the position of the text block, right click the shape and uncheck "Snap Text Block Position". Then use the yellow handle to position the text to your liking.



When finished, the drawing looks like this:



Laura then begins work on an Elevation view by clicking the Elevation tab. This system will be incorporated around an existing fireplace that houses a fish tank filled with many species of fish

including a killer crayfish. How a crayfish lives in a saltwater tank is a mystery to scientists. Fortunately Franz took photos of the room while he was at the MacGowan's house so she has a basis for the drawing. She begins this drawing by dragging a guideline down from the ruler to the page to help line up shapes. To do this, left-click and drag when the cursor turns into a double arrow:



She then right-clicks the Cabinet Tools stencil in the Stencil Tree and selects "Display Docked Stencil".



The shapes in the Cabinet Tools stencil are displayed in the Shapes window:



She then drags the Floor shape from the stencil to the drawing page:



The Floor shape is resized using the handles on either end of the shape:



The next things that she lays out are the fireplace and existing cabinetry in the room. She begins by dragging out the Mantle Post shape to the page:



To make sure that the mantle is the proper size, she selects View->Size & Position Window:



With the shape selected, she then enters in the proper height in the "Height" field of the Size & Position Window:



She then copies and pastes the shape to represent the other side of the mantle. To assure a proper distance between the mantle posts she drags the Bottom Dimension shape to the page. She types in the dimension in the Size & Position Window and snaps the Bottom Dimension shape to one Mantle Post shape then moves the second Mantle Post into position:



Once positioned correctly, she deletes the Bottom Dimension shape from the page. She continues to drag shapes form the Cabinet Tools stencil to complete the fireplace and cabinets:



She keeps the cabinet bottom on the right open to show where the rack will go and adds a door to the cabinet on the left by right-clicking the shape and selecting "Show Solid Door":



To remove the shadow from a shape, right-click and uncheck "Show Shadow":



To fill in the color for the cabinets, she selects each shape then right-clicks and selects Format->Fill:

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				Pa	ge 3/4

She then selects "Wood – Zebrawood" from the "Pattern" dropdown:

She then begins work on building the rack. She begins by dragging over the rack and rack components from the PDM to the drawing page:



She begins assembling the rack by first positioning the electronics. Each elevation shape has a connection point for snapping to the connection points on the rack which are spaced out at 1.75" intervals. To see the connection points she selects View->Connection Points:

🔣 MACGOWAN-001.vsd - Microsoft Visio									
🔛 <u>F</u> ile <u>E</u> dit	<u>V</u> iew	Insert	F <u>o</u> rmat	<u>T</u> ools	<u>S</u> hape	D-Tools			
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Game Ro	A	Header an	d Footer						

A red box indicates when two connection points are connected:



She continues positioning the electronic components including the vent at the top of the rack:



Next she drags over the rack shelves and positions them around the components. When a shape covers another shape, she uses the Visio "Bring to Front" and "Send to Back" commands. Clicking once selects the foreground shape:





She pauses then clicks in the center of the shape to select the shape behind the shelf:

She then right-clicks and selects Shape->Bring to Front:



When finished, she selects all of the rack shapes and moves them to the cabinet shape:





She then drags over the plasma and front speakers and positions them:

The final touches are added to the drawing. She uses the Insert->Picture->From file... command to add some images to personalize the drawing for the client:

🔣 MACGOWAN-001.vsd - Mic	rosoft Visio	
Eile Edit View Inst	ert F <u>o</u> rmat <u>T</u> ools <u>S</u> l	Shape D-Tools Window Help Adobe PDF
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Libert Libert	Object	L Chart
to a lar a sound a.	-Hyperieks	Land Earth, and Land

When finished, the elevation drawing looks like this:



Laura then saves, closes, and Checks in the project.

# **Internal Approval**

Dave then opens SI 5 on his machine and logs in with his license. He clicks the Reports tab then selects the project in the Grid:



The reports he generates are the Detail Cost Summary and Gross Profit by Phase reports. To generate the reports, he selects the Project and then double clicks the report definition from the Report List. The reports display on separate tabs:



After reviewing, he clicks the **[Export To PDF]** (<sup>1</sup>) button and then emails these reports to Mike for approval. Mike is lounging on the beach in Hawaii but takes time to review these and sends back his word of approval.

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Summary		ss Profit												
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` \		~~~.	 ~~~	A	A	AL COM	 			<u>مەر</u>	- مارس	~~~~	ans,	$\sim$

Dave then runs additional reports that will be presented to the client: Proposal, Contract, Cover Page, and Scope of Work. In addition to these reports, he prints the Line and Elevation pages created by Laura.

# **Client Approval**

Franz then meets with the client to present the Proposal and drawings. The MacGowans are beside themselves and sign off on the Project. While there, he takes even more photos of the MacGowan home to assist Laura in the design and engineering of the project.

# Accounting

Dave opens SI 5 and opens the Project. He selects D-Tools->Project Information and changes the status to "06 – Approved":

Project Information	×
Project Contacts	Scope of Work Location Types Locations Zones Component ID Custom Properties
Project Number:	MACGOWAN-001
Project Name:	MacGowan Home
Status:	06 - Approved
Start Date:	E 6 / 3 /2007

He then saves, closes, and checks in the project. Dave then creates a Sales Order for the project that will be used to transfer an estimate over to QuickBooks. With the project still selected on the Projects tab he clicks the Order and Accounting tab:



He clicks the Sales Orders tab and then clicks [New]->SalesOrder:

😽 SI 5.5 Professional	
File View Tools Help	1
Navigator Bar 🛛 🕂 🕂	Client: The MacGowans
Orders and Accounting	Project: MacGowan Home (K.
<ul> <li>View all sales orders</li> <li>View all work orders</li> <li>View all change orders</li> <li>View all service orders</li> <li>Open QuickLinks</li> </ul>	Start Page Sales Orders Work Ord
Projects changed in last week  Change Selected Project Bruce Dickinson Ronnie James Dickinson	Number         ▼         Date Cres           ▶         \$0-001         02/05/2009

A new tab is created for the Sales Order:

	Client: The Jacoowand Project: MacGowan Home (MACGOWAN-001)										
1	Start Page Sa	les Orders 🛛 Wo	rk Orders 🏹 Servic	e Orders 🖌 F	Revision Management 🤇	SO-002*					
्र ग	🔪 🖾 Delete 📕 Save ҧ Reports - 👸 Close 齝 Add Item 🗙 Delete Item 🍼 👘										
		1 des	Order # SC wan Home (MAC		1)						
- A	Sub Total	Labor Tax	Sales Tax	Tota	<b>1</b>	Sales Order Det					
1	0	0	0	0	Order #:	SO-002					
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Dave then clicks [Add Item]:



He chooses to select all of the products then clicks [Add and Close]:

S Add Project Items										
	🚰 Add and Close 🖌 🖌 Select All 🛛 👄 Clear All									
	Equipment Ite Add and									
F	Select	Category 🗸 🗸	WorkOrderNumber 🏼 🏹	Manufacturer 🛛 🗸	Model 🛛	~				
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		Equipment Racks		Middle Atlantic Produ	RSH-2S-C	SH				
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He then Saves the Sales Order:

4		فحريماتهم	ia	فلإطلام حريهم	- Maria
X	./	Start Page	Sales Orders	Work Orders	Service Orde
2	-	Delete 🔓	Save Rep	orts 🕆 🛅 Close	1 Add Iter
				<b>iles Order</b> acGowan Hom	
	$\sim$	And the second s	And	and an and a	and the second

After creating the SO, it is time to push the SO over to QuickBooks as an Estimate via the LinkTools – QuickBooks (also known as QuickLinks) interface. Although not necessary, he opens QuickBooks on his machine so the process will move quicker. In the Navigator he selects Tools->QuickLinks:

😽 SI 5.5 Professional							
File	View	Too	ls	Help			
Navigat	or Bar	<b>@</b>	А	pplication Setup Wizard			Clien
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	/iew all s 	-	Q	uickLinks N			lew 🔻 🛃
M 1	View all work orders						
💱 View all change orders							
🔏 View all service orders							
🐀 Open QuickLinks							

The D-Tools QuickLinks form opens. Since he wants to create in estimate, he selects "Estimate" from the View dropdown and then clicks **[New]**:

🕡 D-Tools QuickLinks V5.0					
View:	Estimate	~			
Estimate	Number	Date	Customer/Job	ProjectName	New Edit Delete

He then selects the proper Sales Order and clicks [OK]:

Select Sales Order				×
Sales Order(s):	Status:		~	
SO #	Date	Status	Project Name	ОК
SO-002	2/15/2009	Open	MacGowan Home	
SO-001	2/5/2009	Open	Dickinson House	Cancel
S0 # S0-002 S0-001	An and the second	Variation	and the second	- And a

The QuickLinks Estimate form opens. He assigns the Customer: Job and adds all of the products from the Sales Order to the Estimate. All of these products have been sold by them before and are therefore linked to QuickBooks items. He clicks **[Save]** to transfer the estimate over to QuickBooks:

Client					Date				_	
Customer:Job:	The MacGowans:MacGowan Home			~		, 5/2009	- Î			Save
Client Name:	The MacGowans			New Customer	Class					Cance
Address1:	123 Clover Lane			New Job		5;				
Address2:			(		Sale	s Order Nu	mber: SO-00	2		
City:	New Dublin						mbol. 50 66	<u>-</u>		
State:	GA				Pro	oduct:				
Zip:	30141					Add		Delete	Assig	n
Product:										
Category	Manufacturer	Model	Item	Description	Quantity	Cost	Amount	Markup	Total	Tax
Accessories	Crestron	BB-4L	CRESTRON:B.	Back Box for I	1	\$60.00	\$60.00	40.5	\$100.50	Tax
Accessories	Crestron	CNXRMAK	CRESTRONIC	Rack Mount Ki	1	\$90.00	\$90.00	60.75	\$150.75	Tax

Once the estimate is transferred to QuickBooks, he emails Marge to inform her of the transaction. Since all of the products were added to the Sales Order, he wants to change the status of the Sales Order to "Closed". He clicks the Orders and Accounting tab->Sales Order tab and double-clicks the

Sales Order to open it. He then uses the dropdown to change the status and then saves the Sales Order:



Since the Estimate is over in QuickBooks, Marge does not even need to interact with SI 5. She opens QuickBooks on her machine and reviews the Estimate before creating Invoices and Purchase Orders.

# **Plan and Schematic Drawings**

Meanwhile, Franz has been in communication with the architect, Irene Drawthings, who designed the MacGowan's house. She does not want to provide the .dwg file since it is her intellectual property but would be happy to provide a printed copy of the plans. After explaining that they just want the two rooms that they working on, the architect agrees to give them a partial floor plan and an elevation in .dwg format. Franz sent Irene a handy .pdf file (that he downloaded from the D-Tools forum <a href="http://www.d-tools.us/showthread.php?t=1041">http://www.d-tools.us/showthread.php?t=1041</a> ) detailing the commands that must be run on the file in order to import into Visio. At first she did not want to spend the two minutes required to run these commands but a phone call from an angry Mrs. MacGowan helped.

Once he receives the email with the .dwg files, he downloads them to his machine and renames them. Since these are not actual SI 5 project files, they do not name these files with the project number as they do for SI 5 project files. To keep all files together he launches SI 5 and then clicks the Projects tab. He selects the project in the Project Grid and then clicks the Selected Project Details tab:

Ŧ	Ĩ 📐		MacGowans IcGowan Home	(MACGOWAN-001)
$\langle -$		🔢 Project Grid	🔛 🛛 Selected Pro	ject Details 🔪 🔍
$\geq$	Sho	w: Projects chang	ed in last week	▼ 2 <sup>1</sup> √5 <
$\sim$		<mark>ojects</mark> rag a column he	ader here to group	) by that column.
3	P	Name 🖓	r ▼ Number - *	🛛 🗣 Status 🛛 🗸
$\leq$		Dickinson House	DICKINSON003	01 - Discovery
$\left  \right\rangle$		Dio Home	0001	01 - Discovery 🧳
$\leq$		MacGowan Hom	MACGOWAN-0	0 06 - Approved 🔾
L	-		ومراجعه والمحمول	American

He then clicks the [Add File] button:

$\overline{\mathbf{A}}$	and a strange and a strange of the s
A MANA A A MANA A MANA	🗋 New 👻 🚵 Add File 🛛 🧳
ł	Filename K
3	MACGOWAN-001.vsd
	j j
	1
7	5
Š.	
- N II	2
WWW	}
4	Project Files 📴 Revisions
$\zeta$	1

The Add File form opens and he browses to the file and then clicks [Open]:

Add File to MacGo	Gowan Home	? 🔀
Look in:	: 🗀 Temp 💽 🕑 😥 📰 🗸	
My Recent Documents	🐨 xref MacGowan Front Elevation.dwg 🎲 xref MacGowan Plan Cropped.dwg	
Desktop		
My Documents		
My Computer		
	File name: xref MacGowan Front Elevation.dwg	en
My Network	Files of type: All files (*.*)	icel

He clicks **[OK]** for the message stating that the files will be copied to the same directory as the project file:



	🗋 New 👻 Add File
	Filename
3	MACGOWAN-001.vsd
	xref MacGowan Front Elevation.dwg
	xref MacGowan Plan Cropped.dwg
È	5
2	1
$\sum$	J 2
) <b>*</b>	Project Files 🔄 Revisions
{	5

The files that he added are now displayed in the "Projects files for:" section:

While he is in SI 5, he also changes the status of the Project to "Engineering" and lets Laura know that it is her time to shine.

Laura then opens the Visio file for the Project and clicks the Plan View tab. Her first order of business is to insert the AutoCAD file onto a Plan page type in Visio. Laura is kind of a geek and actually read the user's guide for SI 5 and she follows the instructions for this (see Visio Interface section of the SI 5 User's guide for details).



She begins by dragging out some stock Visio shapes to represent the furniture in the house (Laura uses Visio 2003 Professional so she has access to many stock Visio shapes):



She then drags out one of the front speakers for the surround system. The default Plan shape for a speaker drops:



For the in-wall and on-wall speakers in projects, she prefers to show a scaled shape instead of the default Plan speaker shape. To change the shape, she right-clicks the shape and selects D-Tools->Shape->Change Shape:




She selects the "Plan Scale" shape and clicks [OK]:

The shape is then changed to a scaled shape that she then positions in the wall of the drawing:



She continues adding all of the speakers to the page. For the in-ceiling speakers on the porch she leaves the default Plan shape. She then adds the touch panel, plasma, and the rack to the page (all products are selected below to make them easier to see):



The touch panel is a specific Manufacturer shape rather than the stock generic shapes in SI 5. When GLV downloaded their Crestron data from D-Tools, they chose to download the Manufacturer specific Visio stencil as well:



The next products that she drags over to the page are the wires for the products. She then connects the wires to the shapes. When the green connection point turns red, the shapes are connected:



When finished, the page looks like this:



When she finishes, she saves and closes the Project. She is going to create a Schematic drawing for the system but wants to use AutoCAD for this. She selects the Project in the Project Grid and then right-clicks and selects Open in AutoCAD->New Drawing:

1	2	Project: Mac	Gowan Home (M	ACGOWAN-00	1)		~	
ζ.		📰 Project Grid 🚺	🚄 🛛 Selected Project	: Details				
ξ	Sho	w: Projects changed	l in last week	-				1
4	~ Pro	ojects						
Š	D	rag a column head	ler here to group by	that column.				
đ	7	Name 🛛 🗸	Number 🗸 🗸	Status		Open Project in SI Text		7 • Filename 🛛 ▼ Folder
Ş		Dickinson House	DICKINSON003	01 - Discovery		Open in Visio	•	SI5 Sample.Dtl Bruce Dick
Ş.		Dio Home	0001	01 - Discovery		Open in AutoCAD	•	👌 New Drawing 📐 hie Jam
$\langle$	►	MacGowan Hom	MACGOWAN-00	07 - Engineering	Ĵ	View Project Information		s MacGowan Hom The MacGo
Ş					1	New Project Ctrl+	N	
< l						Copy Project		1 3
Ś					2	Move Project		
(	1. A.	a sandara da sana ana	the second se	المحمد بمدر بالاحما	1.1	and the second sec	N. 40	

She is then prompted to pick a drawing template. She selects the Schematic.dwg template, types in a file name, and clicks **[OK]**:

New AutoCAD Drawing	<b>E</b> 🔀
Select a drawing template:	
Elevation.dwg Line.dwg Plan.dwg	
Schematic.dwg	
Drawing name:	
MACGOWAN-001 Schematic.dwg	
Ok Car	icel

The file was added to the Project Files list. She then selects the file right-clicks and selects Open File:

Filename								_ △ ▼
MACGOWAN-001 Sche	matic.dwg	ß	Open File	• •		1		
MACGOWAN-001.vsd			New		this file i	n the ass	ociated ap	plicatio
xref MacGowan Front E	levation.dwg	1	Add File	Ir				
xref MacGowan Plan Cr	opped.dwg		Rename Fi	ile				
		$\mathbf{x}$	Delete File	e D	el			
		Ð	Get Latest	:				

The Project launches in AutoCAD:



The display settings above are based on my personal settings. Your AutoCAD interface may vary slightly depending on your settings.

She begins by dragging out the all of the products that she wishes to wire. If The Schematic blocks in SI 5 list the inputs on the left side of the block and the outputs on the right side of the block. Each I/O has a connection point next to it:

Crestron		MC2E
		DB9-RS-232-COM B
1/0 4-CTRL-TERM BLOCK		D B9-R S-232-C OM A
1/0 3-CTRL-TERM BLOCK		TERM_BLK-IR-IR D
1/0 2-CTRL-TERM BLOCK		TERM_BLK-IR-IR C
I/O 1-CTRL-TERM BLOCK		TERM_BLK-IR-IR B
COMPUTER-RS-232-DB9		TERM_BLK-IR-IR A
LAN-DATA-RJ45		TERM_BLK-CTRL-RELAY4
NET-CRESNET-TERM BLOCK		TERM_BLK-CTRL-RELAY3
POWER-24 VDC-3.5 MM		TERM_BLK-CTRL-RELAY2
IR-IR-TERM_BLK		TERM_BLK-CTRL-RELAY1
IN	CO 8-001	OUT

She moves and positions the blocks on the sheet until they are in the desired positions:



She then drags out the wire blocks. The wire blocks used on Schematic sheets in SI 5 are red when not connected to I/Os, and turn green when both ends are connected to I/Os:





When you move and end of the wire block to an I/O connection point, an orange box displays:



When she is finished making connections, the drawing looks like this:



## Second Internal Approval

After finishing, Laura then saves, closes, and checks in the project and lets Dave know that it is ready for review. They decide to do a "working lunch" so Dave logs into SI 5. He then synchronizes his database:



He checks out the project.



Since he wants to be able to work "offline" (not connected to the network), he selects File->Disconnect from SI5.5 Server:



He gets prompted to make sure he's done everything needed before disconnecting from the server:

Work Off	Aine 🔀
?	Before you disconnect from the System Integrator server and work offline please make sure that you have checked out any projects that you want to edit while offline. Also, if you want to view (but not edit) projects while off you must add them to your local cache by selecting 'Make project available offline' in the project list view. Click OK to go offline now.
	Click Cancel to stay online in order to check out additional projects.

He closes SI 5 and then shuts down his laptop. They head over to a familiar coffee joint to discuss. Laura points out that they have done similar systems to this one many times with a few minor differences depending on the Project. They decide to create a Package in SI 5 so that they can "resell" this system in the future without having to build it from scratch each time.

They decide that they want to package the speakers as a 5. 1 surround option for future clients. They decide that they want to have the speakers and the wire in the package. To do this, Dave open the Project in the SI 5 Text interface (they could use any interface to do this) and select all of the products. He then right-clicks and selects Add->Create New Package:

D-Tools View Help								
Products	Project	Data <u>M</u> atrix						
) 📅 🕰 💽	<u>*</u>	🗹 🗙 🛃 🔽 🙋	2 - 2	s fx				
Products Packages		Manufacturer	Model	Category	ComponentID	Room	Install Price	Zone
Packages		Global Vision Ltd	POWER CABLE	Wire And Cable	P0W-007	Game Room	\$0.00 Ai	udio Video Syste
		Global Vision Ltd	POWER CABLE	Wire And Cable	P0W-004	Game Room	\$0.00 Ai	udio Video Syste
	•	Liberty Cable	14-2C-GRY	Wire And Cable	AUD-009	Game Room	\$86.05 A	udio Video Syste
		Liberty Cable	14-2C-GRY	Wire And Cable	AUD-012	Game Room	\$86.05 A	udio Video Syste
		Liberty Cable	14-2C-GRY		AUD-005	Game Room	\$86.05 Audio Video Syst	
		Liberty Cable	Add	•	Product	n	\$86.05 A	udio Video Syste
		Liberty Cable Edit Package Liberty Cable View Extended Data Create Ne Duplicate Replace Product SUR-002	Package	n	\$86.05 Audio Video Syste			
			Create New P	ackage 戻 n	\$86.05 Audio Video Syster			
				SUR-002	Game Room	\$1,722.70 Ai	udio Video Syste	
		Middle Atlantic Produc	Delete		KIT-002	Game Room	\$63.34 Ai	udio Video Syste
		Middle Atlantic Produce Assign		•	s KIT-003	Game Room	\$68.56 A	udio Video Syste
		Middle Atlantic Produc	Refresh Data from Master	s BAR-001	Game Room	\$74.55 A	udio Video Syste	
		Middle Atlantic Produc	Update Data to MasterTab	le s	s SHE-003	Game Room	\$199.96 Ai	udio Video Syste
		Middle Atlantic Produc			s SHE-004	Game Room	\$199.96 Ai	udio Video Syste
		Middle Atlantic Produc	Web Specs		s SHE-001	Game Room	\$199.96 Ai	udio Video Syste
		Middle Atlantic Produc	Select All	Ctrl+A	s SHE-005	Game Room	\$226.24 A	udio Video Syste
		Middle Atlantic Produce De	Deselect All		s RAC-001	Game Room	\$656.27 A	udio Video Syste
		Middle Atlantic Produc	Expand Row		s PAN-004	Game Room	\$52.77 Ai	udio Video Syste
		Middle Atlantic Produc	Collapse Row		PAN-005	Game Room	\$52.77 A	udio Video Syste
		Middle Atlantic Produc			s PAN-003	Game Room	\$52.77 A	udio Video Syste
		Panamax	Expand All		CON-002	Game Room	\$526.12 A	udio Video Syste
		Panamax	Collapse All		SUR-001	Game Room	\$91.16 A	udio Video Syste
		Scientific Atlanta	EXPLORER 8300HD	Video Sources	DVR-001	Game Room	\$439.78 Ai	udio Video Syste
		Sony	KDL-46×BR3	Display Devices	LCD-001	Game Room	\$4,343.65 Ai	udio Video Syste
		SpeakerCraft	IRE-1.0	Control Systems	IR-001	Game Room	\$48.53 Ai	udio Video Syste
		Triad	IW BRONZE/10	Speakers	SUB-002	Game Room	\$1,580.40 A	udio Video Syste
		Triad	IW BRONZE/4 LCR	Speakers	FLU-002	Game Room	\$716.91 A	udio Video Syste
		Triad	IW BRONZE/4 LCR	Speakers	FLU-003	Game Room	\$716.91 A	udio Video Syste
		Triad	IW BRONZE/4 LCR	Speakers	FLU-001	Game Room	\$716.91 A	udio Video Syste
		Triad	NCB SIZE C	Accessories	BRA-001	Game Room	\$128.68 A	udio Video Svste

The Package Properties form opens and he adds a name and description. Since this fancy coffee shop has internet access, he scours the web for a picture of a surround system and adds it to the package properties:

MacGowan Home Package Properties -	• = - 🛛 🔀							
Package Details Package name:	Image							
Description: This system consists of in-wall speakers for the front and subwoofer and on-wall speakers for the								
Report Options								
<ul> <li>Summarize in client reports</li> <li>Ignore labor calculations on equipment and wire products (Use labor type products only for labor in package)</li> </ul>								
	Add I Remove							
Package Contents								
Category Manufacturer Model	CompID UnitPrice MSRP WireLength H							
Items without Accessories								
Wire And Cable Liberty Cable 14-2C-GRY	AUD-009 0.23 0.23 75 A							
Wire And Cable Liberty Cable 14-2C-GRY	AUD-012 0.23 0.23 75 A							
Wire And Cable Liberty Cable 14-2C-GRY	AUD-005 0.23 0.23 75 Au							
Wire And Cable Libertu Cable 14-2C-GBY	∆IID-008 0.23 0.23 75 ∆i							
Base Price:       4,353.50       Location:         Discount:       0       %         Package Price:       4353.50	Equipment in Package can be in different Location/Zone Zone: Audio Video System Save Cancel							

Since he is within a project, he makes sure to select the Location and Zone for these products and then clicks **[Save]**. He clicks **[Yes]** when prompted to update the MasterTable and then **[Yes]** when prompted to add the package to the MasterTable:





They realize that this package could be the basis for some complete solutions including a receiver and a display device. Dave Tools->Manage My Product Data in the Navigator. The MMPD interface opens in its own window:



📲 D-Tools - Manage My Product Data						_ 0
File View Help						
🔚 Product Grid) 誧 Product Explorer 🔞 Download	🛃 Import 🔯 Ad	Iministration				
Manufacturer Category Type Phase Search	<u>*</u>	<b>E 2</b>	🎒 📓 🗾 🗾			
Active Thermal Management	Manufacturer	Model	Category	0	UnitPriceA	Туре
AMX						
Belkin						
Chief						
Crestron Da-Lite						
D-Tools, Inc.						
Extron						
GE Security						
Gyration						
Hubbell						
Display discontinued products						
Display only unapproved products						
Clear						
Filter:						

He then clicks the Product Explorer tab, selects the package then clicks the 🗎 button:

💐 D-Tools - Manage My Product Data	• 🗄 🗕 🗗 X
File View Help	ليباريها تكاتك
State       Product Explore       Import       Administration         Import       Import	

A copy of the package is displayed on a tab in the right-hand side of the screen:

Products Packages GE - CC-BG1600 : Basic Gold 1600 Whole Sys Head End - Audio Video Distribution and Sourc	Package	e Details,									
<ul> <li>Home Theater - Processor, Amplifier &amp; Sources</li> <li>Home Theater - Receiver &amp; Source with Room</li> <li>Home Theater - Speaker System - Ellipse 5.1 w</li> <li>Home Theater - Video System - 3 Chip DLP - V</li> <li>Triad 5.1 Surround IW/OW Solution</li> <li>Wire Assembly - Local Surround System - 5.1 V</li> <li>Wire Assembly - Room Audio with Control</li> <li>Wire Assembly - Room Audio with Control</li> <li>Wire Assembly - Room Audio with Control</li> </ul>	st Description Ni Report 0 Summ V Jgnorr Use	Package Details       Depy of Triad 5.1 Surround IW/DW Solution         Package name:       Image         Description:       This system consists of in-wall speakers for the front and subwoofer and on-wall speakers for the rear.         Report Options       Ignore labor calculations on equipment and wire products         Ignore labor calculations on equipment and wire products       Ignore labor calculations on equipment and wire products         Accessory Options       Image									
Wire Assembly - Structured Wiring - 4 Port Med	Inclur	de accessories,	Prompt								
	~	de accessories,									
	🔿 Do no	ot include acce:	sories					Add Remove			
	Package	kage Contents									
		egory			Qty UnitPrice		MSRP V	VireLength Head E	and Input Termi	nal Ou	
		tems without Ac					100.00		0.01/		
		Speakers	Triad	IW BRONZE/10 POWERSUB		1400.00 1		0	SPK		
		Speakers	Triad	OW BRONZE SURROUND-BASIC	2	450.00			SPK		
				le 14-2C-GRY 4 LCR with Accessories	6	0.23	0.23	75 Audio H	1E		
		Speakers	Triad	IW BRONZE/4 LCR	3	600.00	600.00	0	SPK		
		Speakers Accessories	Triad	Ncb size c	3 1	50.00	50.00	0	SEK		
		Accessones	Thao	NCD SIZE C	1	50.00	50.00	U	_		
	<										
	<								Add [	) Delete	
	Sase Price	ce: 4,2	53.50						Add [	) Delete	

He modifies the name and description for the package and then adds the receiver from the project to the package by locating it in the Product Tree and dragging it over to the "Package Contents" section:



He repeats that for the display device then clicks **[Save]**. The package he just created now displays in the MMPD interface and is available for use in projects:

🛂 D-Tools - Manage My Product Data
File View Help
🚮 Start 📃 Product Explorer 🔠 Product Grid 🔞 Downit
🖻 – Packages 🛛 👋
GE - CC-BG1600 : Basic Gold 1600 Whole Syst 🛛 🚽
Home Theater - Processor, Amplifier & Sources
Home Theater - Speaker System - Ellipse 5.1 wi
Triad 5.1 Surround IW/OW Solution
Wire Assembly - Local Surround System - 5.1 W
Wire Assembly - Reference Surround System - 7
Wire Assembly - Room Audio with Control
🦷 🦳 Wire Assembly - Structured Wiring - 4 Port Medi
Triad 5.1 Surround IW/OW Surround System w

## **Work Orders**

They shut down SI 5, finish their lattes and head back to the office. When they get back to the office, Dave connects his laptop to the network and opens SI 5. Since he is disconnected from the SI5.5 Server, he is not prompted to login. To put himself back "online" he selects File->Connect to SI5.5 Server:



He then synchronizes his data:

诸 SI 5	.5 Profe	ssional	_	-				
File	View	Tools	Help					
Navigat	or Bar			1	P .			
Start								
Create a new project           Image: Second system           Image: Second system           Image: Second system								
و چ	iyne prod	duct data	)					
<b>S</b> (	)pen Ma	nage My	Product Data					
	۹۰۰۰۵.۵۰۰۰		tun Wizzeh-	~~~				

After a conversation with Marge, Dave knows that the Products for the Project are on order and will be arriving next week. Dave then changes the status of the Project to "08 - Production". He then checks in the project so he can create Work Orders for the project. To create a Work Order, he clicks Orders and Accounting tab->Work Orders tab->New->Work Order:

😽 SI 5.5 Professional		(
File View Tools Help		
Navigator Bar 🛛 🕂 🕂	🔥 🖉 Client: The M	acGowans
Orders and Accounting	Project: Mac	Gowan Hom
	Start Page Sales	Orders <b>VW</b>
View all sales orders	🔛 New 🕶 📶 Edit 📓	Delete 📑
🟹 View all work orders	Sales Order	-
💱 View all change orders	Work Order N	War
🕰 View all service orders		Wor
🐀 Open QuickLinks	Service Order	
	E Number V	Desire Marca
Projects changed in last week 🛛 🖌 🛃		Project Name ; ckinson House
St. Charter Andred Project		

The Work Order form opens:

🖥 Work Order					- 🗆 🔀
🔒 Save 🛛 🔶 A	dd 🕶 🗶 Delete   🛃 Assig	n 🛛 🙀 Send an E-mail	• Reports •		
Details	Work Order MacGowan Home	# (MACGOWAN-001) Equipment	Est. Work 0	Act. Work	0 Status: Open
Work Orde			ormation		
Work Order #:		Client:	The MacGowans		
Date:	2/15/2009	Address1:	123 Clover Lane		
Assigned To:		Address2:			
Status:	Open	V City:	New Dublin	State:	GA
🔲 Use Actual I	Install Hours in Sales Order	Postal Coo	le: 30141	Country:	
Action Rec	quired (Description)				~
					~

To add products to the Work Order, he selects Add->Item(s):

😼 Work Or					
🔒 Save 🔤	👆 Add 👻 🗶 Delete 🛛 🛃 Assign 🛛 🐼 Send an E-m				
	Task rder #				
	Item(s)				
	WO To St Add New Equipment/Labor Item(s) N-001				
🗍 🖬 Detai	s 🐼 Tasks 🕻 🤷 Labor 🔌 Equipment 🛛 🧳				
Work Order Details					

He plans on creating two Work Orders, one for the Rough-In and Trim Phase, and one for the rest of the work. When the "Add Items to Order" form opens, he uses the filter in the Phase column to filter to "Rough-In":

76	🖥 Business Manager: Add Items to Order 🛛 📃 🗖 🔀						
	🔛 Add and Close 🛷 Select All 👄 Clear All Estimated Install Date 2/15/2009 💽						
2	Equip	ment Item Labor Item					
	V	Component ID	Location 🛛 🗸	Zone 🛛 🏹	Wire Length	Phase 🛛 🗖 🔼	
		SHE-004	Game Room	Audio Video System	0	(All)	
-		PAN-003	Game Room	Audio Video System	0	(Custom) (Blanks)	
		SHE-003	Game Room	Audio Video System	0	(NonBlanks)	
		PAN-004	Game Room	Audio Video System	0	Finish Rough-In	
		PAN-005	Game Room	Audio Video System	0	Trim 😽	
		MOU-001	Game Room	Audio Video System	0	Finish	
L,	$\sim \sim \sim$	KIT-003	Game Room	Audio Video Suetem	mar mar mar and the second sec	Einish	

He then clicks [Select All] followed by [Add and Close]:

٦	😤 Business Manager: Add Items to Order 🛛 🚽							
	ł		🖌 S	elect All	-	Clear All	é	
	/	Equipment I tem	Add ar	id Close por Item			1	
	F	Select		Estimated Install Date				
				02/15/2009			K	
		<b>&gt;</b>		02/15/2009			R	
U	~			02/15/2009		$\mathbb{F}$		
1	4 N			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1.1			

The Equipment displays on the Work Order form:

📲 Work Order							
启 Save   🔶 Add 🕶 🗙	🔚 Save   💠 Add 🔻 💥 Delete   💆 Assign   🖂 Send an E-mail 💌 🗐 Reports 🔹 💈						
Work Order # MacGowan Home (MACGOWAN-001) Est. Work 4.14							
🚡 Details 🟹 Tasks	🚨 Labor 📉 Equ	ipment				5	
🛃 Task 🏹 🕶	Manufacturer 🛛 🗸 🕶	Category 🖓	7 -	Model	7.	Compo	
►	Crestron	Wire And Cable	CRE	SNET		CON-00-	
	Liberty Cable	Wire And Cable	14-2	C-GRY		AUD-01	
	Liberty Cable	Wire And Cable	14-2	C-GRY		AUD-01	
march my march	And a support the same family of	- Catlan an	محرارين	*****************		SON "	

🖥 Work Order Add 🝷 💢 Delete 🖂 Send an E-mail 💌 🔚 Reports 🧣 🚽 Save 💙 Assigni Work Orde Assign Actual Installed Hours to the Selected 4.14 MacGowan Home (MACGOWAN-001) 👼 Details 🏹 Tasks 🚨 Labor, Equipment F Task  $\nabla \cdot$ Model  $\nabla \cdot$ Manufacturer Category  $\nabla \cdot$ CRESNET Wire And Cable Crestron Liberty Cable Wire And Cable 14-2C-GRY Liberty Cable Wite And Cable 14-2C-GRY

He selects all of the products and then clicks [Assign Properties]:

On the Work Order Item Properties form, he assigns the team and the expected install date then clicks **[OK]**:

🖁 Work Order Item Properties					
Assigned To:	Calvin & Hobbes 🛛 🗸				
Expected Install Date:	2/15/2009				
Actual Install Date:	(none)				
Actual Hrs.					
Actual Install Hrs will rows based on estim	be divided pro rata to all selected ated hrs.				
	OK Cancel				

When finished, he clicks [Save]:



The work order then displays in the grid. He selects the Work Order he just created and clicks **[Reports]**->Work Order by Location:

ł		🥕 Client:	: The	Ma	cGowa	ans	e (MAC(	GOWAN-00	1)	- <u>)</u> -ei	North State
1		Start Page	Sa	les O	rders /	Wo	rk Orders	Service Or	ders	Revisio	on Mç
2	Ŧ	New 🝷 🔀	Edit	×	Delete		Reports 🔻	💄 Manage	e Resou	rces 🖂	l s(
2	_		_				Job Cost	ing by Phase			
2		3	-	•	W	( 🔝	Packing L	ist by Locatio	n	w	1
3							Project A	nalysis by Ph	ase		9
<pre>}</pre>							Ship List	by Location			_
Š,	P	Number	7		roject Na		Warehou	ise Labels		eate ⊽	
Ł	┣┣	W0-003			Gowan I		Work Ord	der by Locatio	n N	1009	02
5		W0-001			kinson H					009	01
ξ.		W0-002		Dick	kinson H	ouse	DICK	INSON003	02/10	/2009	02%
21,	L.,			<u></u>	A.A.	<u>_</u>		مدينجي			2

The report generates on a tab. He prints two copies of the Work Order, one for each installer:

ders Revision Management 📶 Work Order by L	ocation - WO-003 [WorkOrderReport]
3	<u> </u>
92 V 🖸 💽 1/2 🕓 <u>B</u> ackward	🗑 Eorward 🛛 🖉 📫 🖬 🖬 🔹 🐓
\$ 2 1 3 1 4 1	
a hard a second product of the second s	A martine provide provident of

He then repeats the above procedure to create a Work Order for the following day for the rest of the products in the project.

He wants to print additional reports for the install team so he clicks the Reports tab in the Navigator then launches the Reporting Center to run their installation reports: Pick List, Brother Wire Labels, Checklist by Location, etc... He also prints the Elevation, Plan, and Schematic pages to send with the installers.

## Installation and Change Order

A week later the equipment arrives and the project is now ready for install. Calvin and Hobbes load the truck, make the trek, and begin the install. While there, Mrs. MacGowan mentions that she would like a separate controller for the covered porch so they don't have to constantly remember to bring the ST-1700 outside with them.

Hobbes calls Franz to let him know about the requested change. Franz sits down with Dave and they decide, based on the client's budget constraints, that they will add a Crestron CT-1000 next to the Jacuzzi. Dave opens SI 5 and checks out the project. He then clicks "Create a new revision of this project":



The following screen opens. They leave the default file name for revisions so he clicks [OK]:



Revisions display on the Selected Project Details tab:

$\sim$ 1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
$\sum$	📝 Promote	Revision 🔀 Delete
$\geq$	Revision 👻	Filename 📲
$\sim$	0	MacGowan Home (Rev 0).dtlrev
$\leq$		
2		)
$\leq$		1
} »	Project	Files Revisions
3		

Dave then opens the project and attempts to add the CT-1000 to the project but it is not in their database. He selects File->Manage My Product Data:

💐 D-Tools - Manage My Product Data						_ 🗆 🔀	
File View Help	File View Help						
📋 Product Grid) 🏢 Product Explorer 🔞 Download	🖽 Product Grid 🛙 🏣 Product Explorer 🔞 Download 🖓 Import 🌼 Administration						
Manufacturer Category Type Phase Search	👌 🗹 🖬 🗙	Z 2↓	🎒 🕱 🛛 🛃				
Active Thermal Management	Manufacturer	Model	Category	0	UnitPriceA	Туре	
Belkin ⊒							
Da-Lite							
D-Tools, Inc.							
Extron							
GE Security							
Gyration							
Hubbell							
Display discontinued products							
Display only unapproved products							
Clear							
Filter:							

He then clicks the Download tab, selects the product for download and then clicks [Download]:

🅞 D-Tools - Manage My Product Data		• E - 7 🔀
File View Help		
🚮 Start 🔢 Product Explorer 🔠 Product Grid 🧯 Download	💫 Import 🔯 Administration	
Select products to download	Products you have selected for download	Download options
Show me:		Select fields you want updated:
	□ [] Crestron □ Compared and the second	
All D-Tools Manufacturers	🗄 🗁 Control Systems	☑ Description ☑ MSRP
CP2E     CP2E     CPC-2000A     CPC-2000A     CPC-CAMI     CPU2     CPU2     CT-1000     CT-1550     CT-1550     CT-1600L/W-DW     CT-3200     CT-3200     CT-3500L     CT-3500L     DAPI-PAK	L   CT-1000	Labor     Dimensions     I/D     Specifications     Inge     Packages     Download Visio shapes     Download AutoCAD blocks
		Mark the products I download as unapproved Go to D-Tools DataXChange Company Name: D-Tools, Inc Senos Data subscriptions available: 420247
MP2		Download
Selected for download: 1 Product(s)		

He calls Marge to confirm the pricing and install hours then clicks the Product Explorer tab to edit the product. Once he edits the product, he adds it and a Cresnet run to the project. He then saves, closes, and checks in the project.

He then wants to create a Change Order for the client to sign before they proceed. He selects the project in the lookup and then clicks the Business Manger tab->Revision Management tab. He checks the two revisions and clicks **[Run]**:

😼 SI 5.5 Professional							🗕 🗗 🔀
File View Tools Help				-			
Navigator Bar 🛛 🗛		Client: The MacG	owans				Checked Out to You
Orders and Accounting		Project: MacGow	an Home (MACGO	WAN-001)			Check Out Check In
	Star	t Page 🛛 Sales Order	s Work Orders	Service Orders / R	evision Managemen	t]	•
View all sales orders	Resto	ore 🛛 🔛 Reports 👻 🗌	View:	*	Progress:	🛛 🛷 Select All 👘 👄 Deselect All	
View all work orders		~~	Desta de Dest		Marca		
💱 View all change orders	E					wan Home (MACGOWAN-001)	
🔏 View all service orders			Please choose two p	roject revisions fro	m below.		
🐀 Open QuickLinks							
Projects changed in last week 💉 📓							
⊟- Change Selected Project							
🗄 💑 Bruce Dickinson 🗄 💑 Ronnie James Dio							
🖃 💑 The MacGowans							
- 🔛 MacGowan Home							
^							
🚹 Start							
🚮 Manage Data							
🐴 Clients and Contacts							
Projects							
	Run	)					
👔 Reports	Select		Name	Revision	1	Description	
Orders and Accounting		MacGowan Home.dt		1	Project File		
		MacGowan Home (R	lev 0).dtirev	0	Project Revision		
📑 Scheduling							
🔗 Setup							
~ >	-						

The display defaults to "Project Overview" so he selects "Equipment and Labor" from the dropdown:

😽 SI 5.5 Professional	
File View Tools Help	i i i i i i i i i i i i i i i i i i i
Navigator Bar 🛛 🕂 🕂	Client: The MacGowans
Orders and Accounting	Project: MacGowan Home (MACGOWAN-001)
	Start Page Sales Orders Work Orders Service Orders Revision.
View all sales orders	🔯 Restore 📳 Reports 🔹 View: Project Overview 🔹 Pr
🟹 View all work orders	Project Overview
😨 View all change orders	Projec Equipment and Labor ger
🏹 View all service orders	Comparing project revision #1 to project revisit,
han an and some a source of the second	and the town the part that a part of the town

He then checks both products and clicks Reports->Change Order:

<b>4</b>	Client: The MacGowans Project: MacGowan Home (MACGOWAN-001)	
	Start Page Sales Orders Work Orders Service Orders Revision Managem	ient 🍦
Ę	🐼 Restore 📓 Reports 🗸 View: Equipment and Labor 🔹 Progress:	
\$	Change Order 🔥 🚺 By Location	Gowa
$\langle \rangle$	🔁 🕼 Refresh Report List	auva
- {	By Location By Zone	
	Select Manufacturer By Zone Bulliosoftion	Comport

The Create Change Order form opens, click [Create]:

😽 Create	e Change Orde	-			+ E _ (	] 🔀
		🧲 Create 🤇	Change Ord	ler		
-		J Create a Ch	ange Order for the	e selected items.		
The se	elected items wi	ill be added to your Chang	ge Order.			
			-			
	Preview: Equ	ipment 👻	Progress:			
Select	Manufactu	rer Model	Category	ComponentId	Change Type	
<b>&gt;</b>	Crestron	Crestron	Control Systems	TOU-005	Added	
>	Crestron	Crestron	Wire And Cable	CON-006	Added	
					Cancel	te

The Change Order displays on a tab:

OWAN-001)	
Service Orders	Revision Management Change Order (Project: MACGOWAN-001)
-	and a second and the second and the second s

He prints the report and Franz then meets with the client's to discuss and to get a signature.

## Updating the Documentation and Closing the Project

Laura wants to update the drawings to account for the added touch panel so she opens the MACGOWAN-001.vsd file and drags out the CT-1000 and Cresnet products to the Plan View page and positions them next to the Jacuzzi:



When finished, she saves and closes the file and then launches the MACGOWAN-001 Schematic.dwg file to add them to the schematic drawing:

				<u>h h n n h</u>
<u></u>	Crestron NET-CRESNET-TERM_BLK		CT-1000	7
	IN	TOU-004	OUT	
		CON-005		
	and the state of the state of the		and the second	

When finished, she changes the project's status to "10 – Completed" and then saves and closes the project file. Time for lunch!

## **Appendix A: Global Vision Process Flow**



#### 98 Appendix A: Process Flow



## Change Management Process Flow



# **Appendix B: Help Videos**

http://www.d-tools.com/site/downloads/SI%205%20Help%20Videos.pdf