



**PROGRAM MANAGER
EXPEDITIONARY POWER SYSTEMS
MARINE CORPS SYSTEMS COMMAND**

AutoDISE

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Agenda

- **History**
- **System Capabilities**
- **USMC Version**



AutoDISE History



AutoDISE is the current U.S. Army computer based electrical camp planning tool.

Information and downloads are available on the internet at <http://www.autodise.net/>

- **Computer model developed to simulate the use of:**
 - **Distribution Illumination System, Electrical (DISE),**
 - **Power Distribution Illumination Systems, Electrical (PDISE).**
- **Designed for the use in Army systems**
- **Uses graphics interface.**
- **Standalone client application**
- **No formal install**
- **Run directly off of a CD**



AutoDISE History

- **AutoDISE is used to engineer Army DISE Layouts for systems that consist of:**
 - **Multiple shelters,**
 - **Electrical consumers, and**
 - **Electrical power generators.**
- **DISE (Army) and MEPDIS (USMC) consists of electrical cables, connectors, feeder centers, and distribution centers that are used to distribute electrical power to the equipment.**
- **A user of AutoDISE should refer to the operator and maintenance manual for MEPDIS**
 - *It is the authority over information presented in the user's guide and software.*

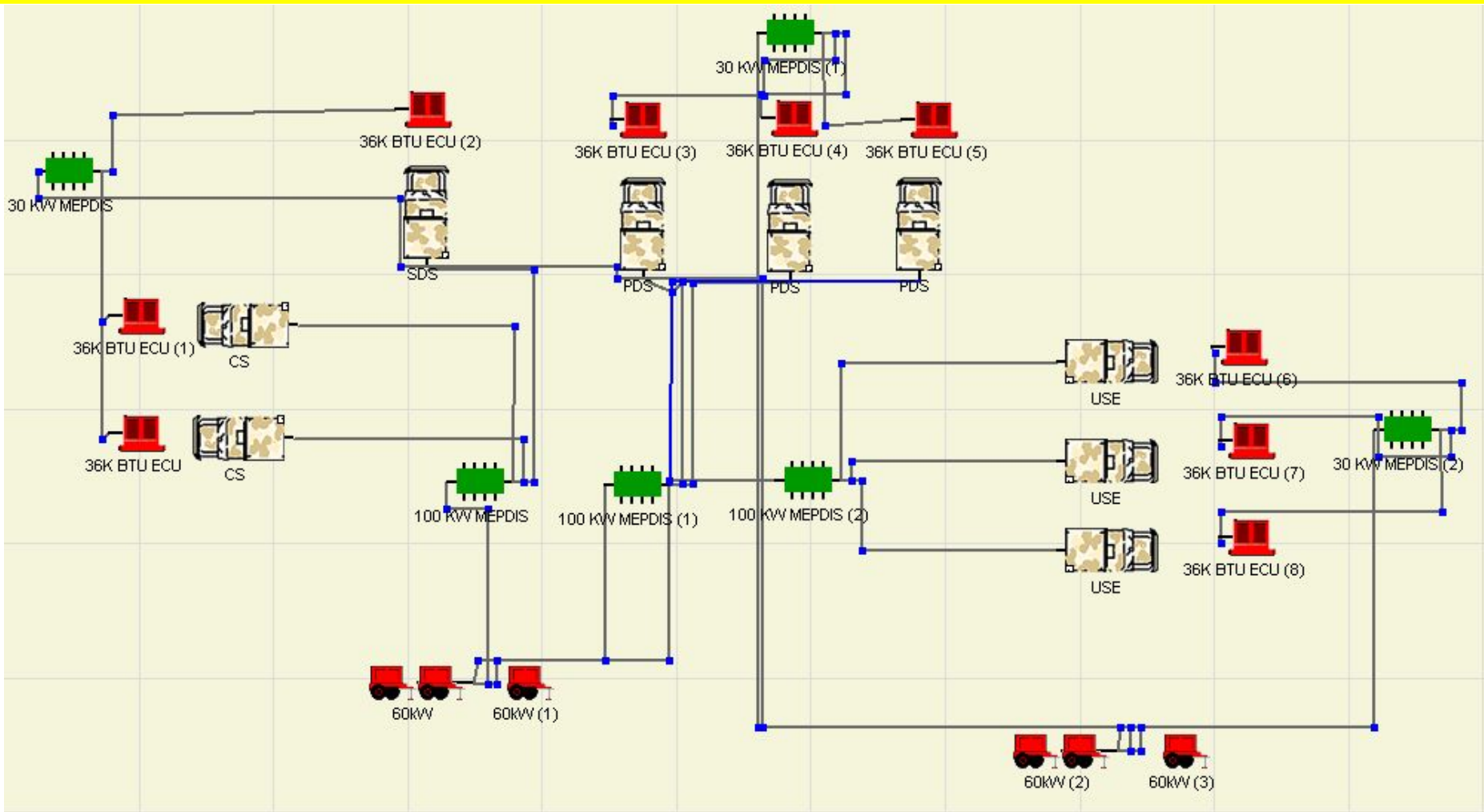


System Capabilities

- **Camp layouts to scale.**
- **Required equipment inventory.**
- **Phase balancing.**
- **Automatic connection of power distribution and power consuming items.**
- **Individual tent/shelter layouts.**
- **System analysis to include total kw, total loads, and available kW.**
- **User defined power distribution systems.**
- **User defined loads.**

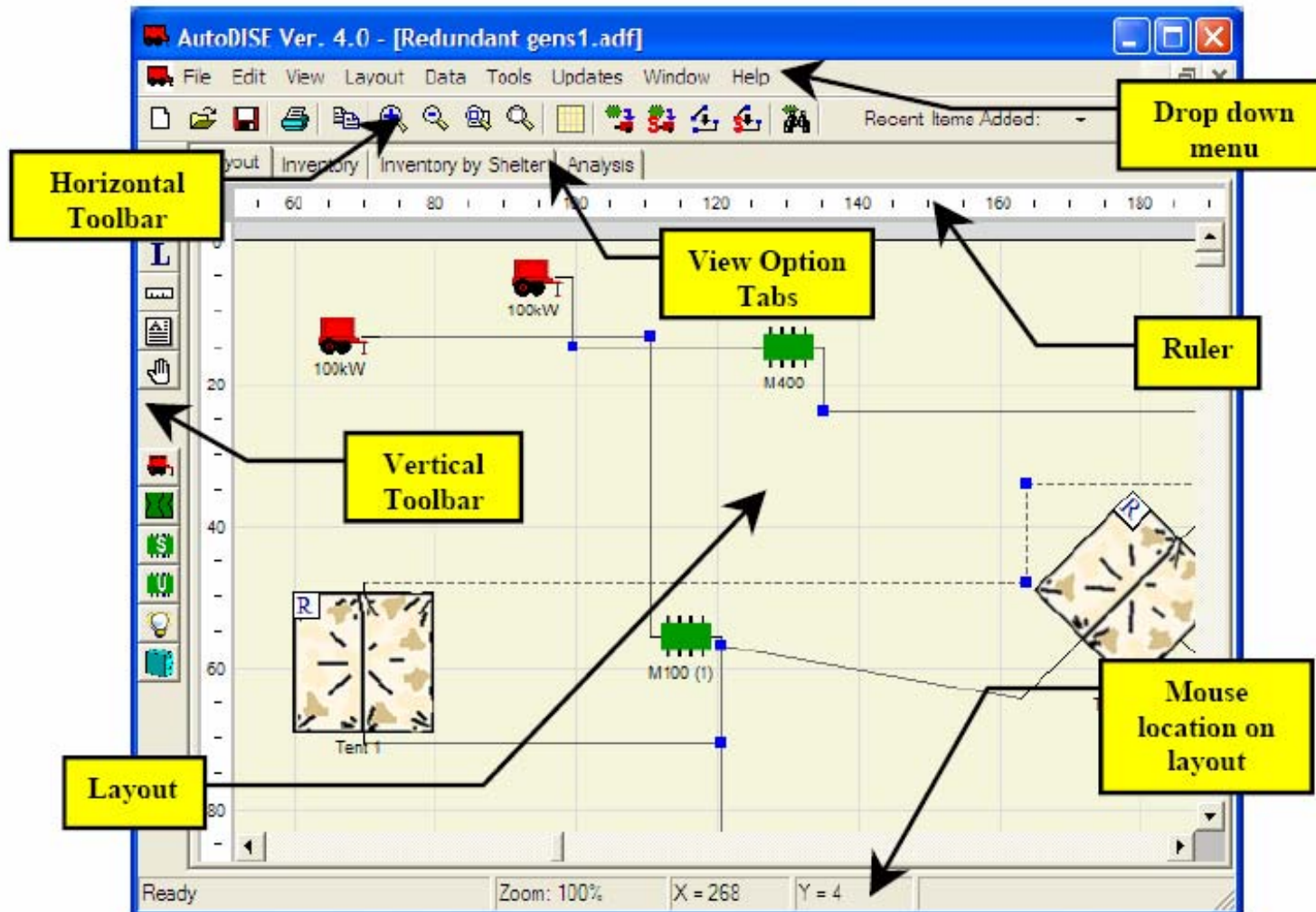


System Capabilities





System Capabilities




Windows based pull down menus with drag and drop capability.



System Capabilities

The screenshot shows a software window titled "Item Properties" with a blue title bar and a close button in the top right corner. The window is divided into two main sections: "Item Detail" on the left and "Connected Devices" on the right.

Item Detail:

- Type: Generator
- Name: 100kW (text input field)
- Icon:  Change Icon (button)
- Rating per Ø: 277.8 A
- Mode: 120/208V, 3Ø 4-wire
- Comments: (empty text area)

Connected Devices:

Device	# Ø	Phase Loads			Rotation
		A	B	C	
M100 (1)	3	25	30	30	
Phase Load Totals:		25	30	30	

At the bottom of the window, there is a navigation bar with a "Cancel" button and a status indicator that says "Item 1 of 10". Below the navigation bar, there are two lines of small red text: "* Moving to new item auto-saves changes" and "- 'Cancel' only applies to current item."


Ability to view each generator set and connected devices with load and phase details.



System Capabilities

Item Properties

Item Detail

Type: DISE
Name: M100 (1)
Icon: 
Comments:

Power Connections

Status	Name	I/O	# Ø	Rating (A)	Phase Loads			
					A	B	C	Ø
In Use	J-1	input	3	100	25	30	30	
Open	J-2	output	3	100	0	0	0	
Open	J-3	output	3	60	0	0	0	
In Use	J-4	output	3	40	5	10	10	
In Use	J-5	output	3	40	5	10	10	
In Use	J-6	output	3	60	15	10	10	
Open	J-7	output	1	20	-	-	0	C
Open	J-8	output	1	20	0	-	-	A

User can view each individual power distribution panel and all connected loads. The system allows views of available connection points. Also an automatic phase balancing feature will notify the user when phases are outside of user defined tolerances.



System Capabilities

Layout Inventory Inventory by Shelter Analysis

Layout Inventory (Click on column headers to sort)

Type	Name	Mode	Quantity	In Shelter?	# Ø	AC/DC	Generator
Generator	10kW	120/208V, 3Ø 4-wire	1	No	3	AC	10kW
Breaker Panel	A BOX	-	1	Yes - ICU (1)	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - PLX	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - ICW	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - ICU	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - Radiology Tent	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - PRE-OP/ICMS/POST-OP	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - TOC	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - ICU (2)	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - Sanitation Center	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - TOC	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - Feeding Tent	3	AC	Not connected
Breaker Panel	A BOX	-	1	Yes - Company HQ	3	AC	Not connected

Ability to export inventories to Excel, MS Word, or Adobe PDF Files.



USMC Version

- **USMC final version will include Army systems, plus:**
 - Old USMC MEPDIS,
 - New USMC MEPDIS,
 - USMC Field Wiring Harness,
 - All standard cable sets
- **Ability to recognize paralleled generator sets**
 - Beyond the Army power plant model,
 - Including operating in parallel through the new MEPDIS.
- **Warning when generator is running under wet stacking conditions**



USMC Version

- **CD-ROM will be the delivery medium**
 - **To be run as stand alone application**
 - **Will not be NMCI supported**
 - **Data files will need to be stored to your computer**
- **Crib-sheet handout for quick reference**
- **PowerPoint training package**
- **Final version available now.**



Fielding Issues

- **CDs are available now.**
- **See your FSR for your copy and training.**



IF NOTHING ELSE, REMEMBER THIS:

- **AutoDISE does not take the place of formal school training.**
- **It is designed to be used by someone trained in electrical camp planning.**



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Questions ?

