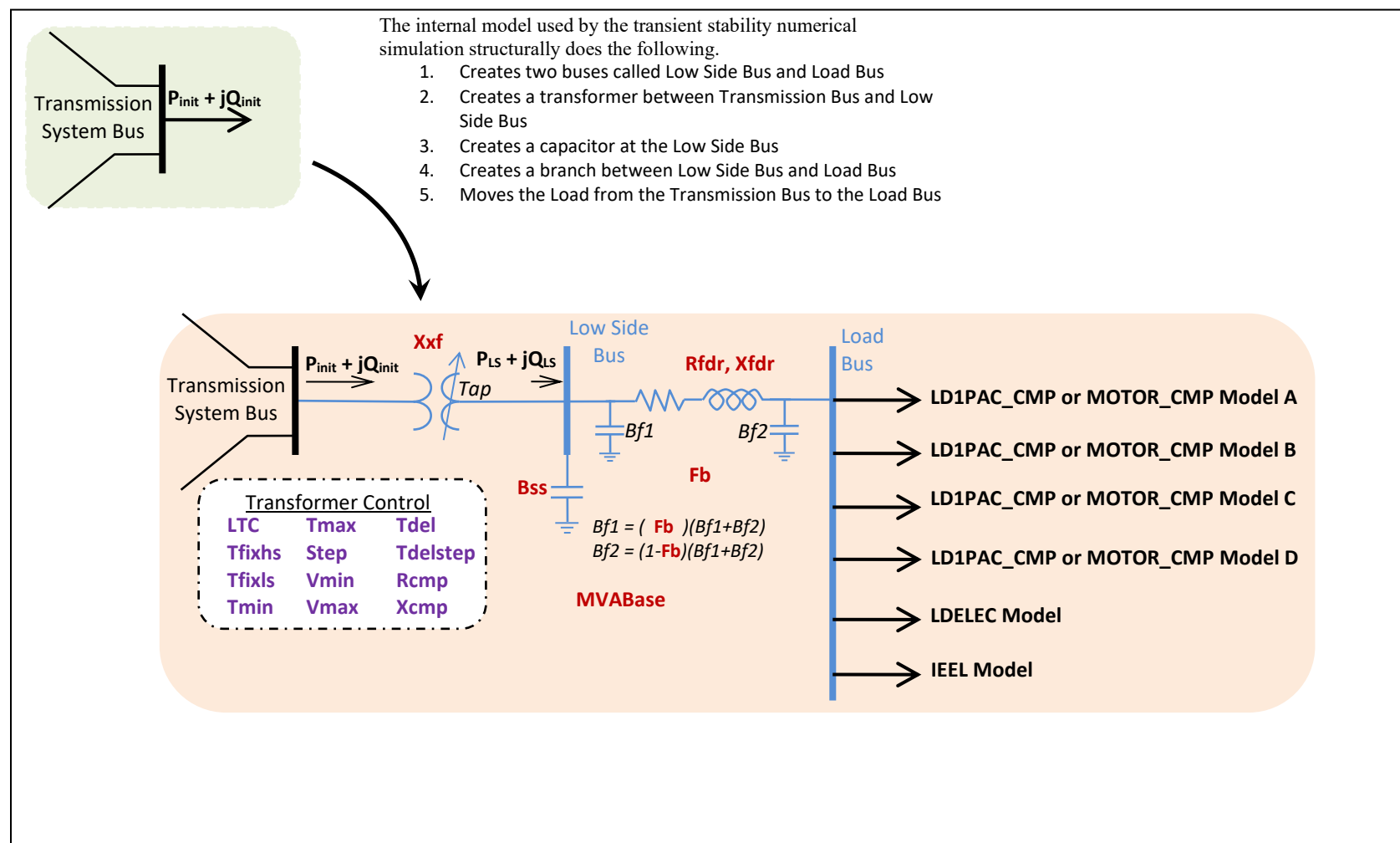


Load Characteristic CMPLDW



Reading and Writing of CMPLDW records from DYD files

When reading a DYD file into PowerWorld Simulator, CMPLDW models are automatically split up into a separate Load Distribution Equivalent Type and CMPLDWNF load characteristic (which is assigned to a Load Model Group to which the load is assigned).

The names of the Load Model Groups and the Load Distribution Equivalent Types are initialized from the Long ID fields which are read from the EPC file. For each CMPLDW record read from an EPC file, the Long ID field read from the load record's EPC file (in Simulator this is stored in the field *EPC File\GE Long ID*) is parsed and split into two strings by the first underscore character. For example, "HID_RES" would be split into "HID" and "RES". The first string is then used as a potential name for the Load Model Group, while the second string is used as a potential name for the Load Distribution Equivalent Type. If no EPC file Long ID fields are available then the names are initialized to "Unknown" instead.

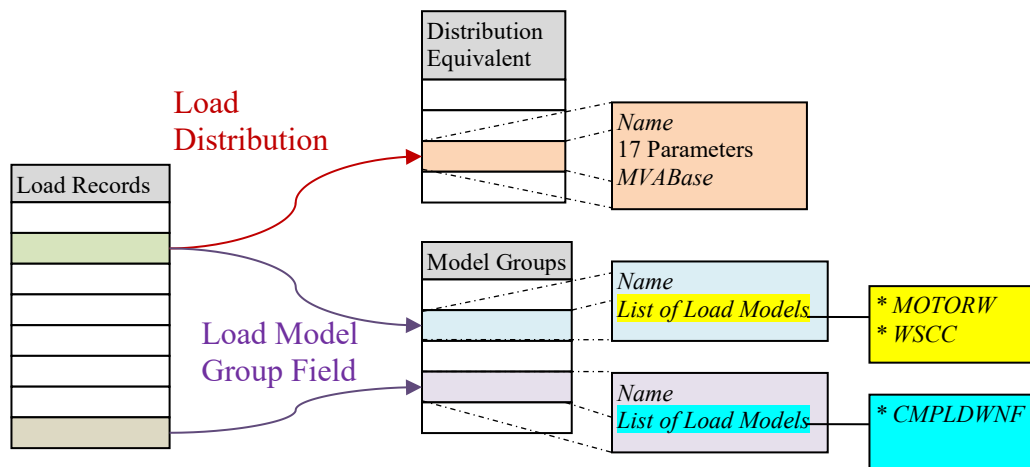
A separate Load Distribution Equivalent Type is then created for all CMPLDW records for which the following three things are exactly equal.

- First 17 CPMLDW parameters
- *MVABase* for the CMPLDW record
- Potential name obtained from the GE Long ID

The parameters of the Load Distribution Equivalent Type are taken directly from the first 17 parameters of the CMPLDW record and the *MVABase* of the CMPLDW record. The *Name* of the Load Distribution Equivalent Type is taken from the potential name of the GE Long ID field. All load records which are grouped in this way are then assigned to this same Load Distribution Equivalent Type. After creating all of the Load Distribution Equivalent Types using this process it is possible for more than one of the Load Distribution Equivalent Type to have the same name. As a result, the list of Load Distribution Equivalent Types is processed and the *Name* fields have numerical strings appended to them to ensure the uniqueness of each *Name* field.

In a similar manner, a separate Load Model Group is created for all CMPLDW records for which the following three things are exactly equal.

- Parameters 18 through 129 of the CPMLDW record
- Potential name obtained from the GE Long ID



For each unique grouping, a CMPLDWNF model is created and assigned to the load characteristics of the new Load Model Group. The parameters again are directly taken from parameters 18 through 129 of the CMPLDW record. The *Name* of the Load Model Group is taken from the potential name of the GE Long ID field. All load records which are grouped in this way are then assigned to this same Load Model Group. After creating all of the Load Model Groups using this process it is possible for more than one of the Load Model Group to have the same name. As a result, the list of Load Model Groups is processed and the *Name* fields have numerical strings appended to them to ensure the uniqueness of each *Name* field.

An example final result of Load Distribution Equivalent Types is shown in the figure to the right.

When writing a DYD file out of PowerWorld Simulator, special processing is used to handle CMPLDWNF records. Simulator will automatically combine the parameters of the CMPLDWNF and the Load Distribution Equivalent Type to write out the appropriate CMPLDW model.

Reading and Writing of MOTORW records from DYD Files

When reading a DYD file into PowerWorld Simulator, all MOTORW models are now processed to group those together which have identical parameters and identical *MVABase* values. For each unique grouping a new Load Model Group is created with a *Name* of "MOTORW" with additional groups names "MOTORW 2", "MOTORW 3", and so on. A MOTORW model is then created and assigned to the load characteristics of the new Load Model Group.

When writing out a DYD file from PowerWorld Simulator, and MOTORW models which are assigned to an aggregation object such as the new Load Model Group, Area, Zone, Owner, System, or Bus will automatically be written as though the MOTORW is assigned to the specific load record.

Model Explorer: Loads

Fields

Explore Fields

Find Field... Add ->

Available Fields

- Custom
- Difference Flows
- EPC File
 - EPC Modification Status
 - Flagged for Delete in EPC
 - GE In Service Date
 - GE Long ID
 - GE Normal Status
 - GE Project ID
 - GE Retirement Date
- Transient Stability
 - Results
 - Save
 - Load Characteristic Name (Motor)
 - Load Characteristic Name (Static)
 - Load Distribution Equivalent Type
 - Load Model Group
 - Load Relay Name

Expand Collapse

Frozen Columns 1

Reset to Factory Defaults

Load Records

Filter Advanced Load

Number of Bus	Name of Bus	GE Long ID	Load Model Group	Distribution Equivalent Type
1	10005 ALCAZAR	HID_RES	HID4	RES 43
2	10008 ALLISON	HID_COM	HID	COM31
3	10013 ANDERSON	HID_RES	HID4	RES 11
4	10015 ARNO_1	HID_RES	HID4	
5	10017 ARRIBA	HID_RES	HID4	
6	10020 ASPEN	HID_RES	HID4	RES 55
7	10022 AVILA	HID_RES	HID4	RES 90
8	10027 BACA	HID_MIX	HID4	
9	10029 BALL_PRK	HID_RES	HID4	
10	10032 BECKNER	HID_COM	HID	COM22
11	10034 BEL_MIR	HID_RES	HID4	RES 43
12	10036 ARNO_2	HID_RES	HID4	RES 11
13	10037 FIRST_ST	HID_RES	HID4	RES 62
14	10040 BEV_WOOD	HID_RES	HID4	RES 35
15	10041 BISTI	HID_RAG	HID3	RAG47
16	10043 BLCKRA	HID_RES	HID4	RES 35
17	10046 BOSQUE_F	HID_RES	HID4	
18	10049 BROADWAY			
19	10050 BUCKMAN	HID_COM	HID	COM32
20	10052 BURNHAM	HID_RAG		
21	10053 CAMEL_TR	HID_COM		
22	10056 CANYON	HID_RES		
23	10058 CAPITOL	HID_COM		
24	10061 CENTRALP	HID_RES	HID4	RES 90
25	10064 CHURCH_R	HID_RES		
26	10067 CLAREMNT	HID_COM	HID	COM53

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