Building Energy Data Exchange Specification (BEDES) Compliant Mapping	
Date	2/10/2016
Implementation	eAuditPro
Implementation Version	
BEDES Version	V1.2

For more information about BEDES, please visit   https://bedes.lbl.gov/

eAuditPro term	Enumerations	Definition	Unit of Measure	BEDES Term	BEDES Mapping	BEDES Units
Physical Address				Address Line 1	Address Line 1 = [value]	n/a
City				City	City = [value]	n/a
State				State	State = [value]	n/a
Zipcode				ZIP Code	ZIP Code = [value]	n/a
Latitude				Latitude	Latitude = [value]	degrees
Longitude				Longitude	Longitude = [value]	degrees
Property Description				Premises Description	Identifier Label = "Premises"	
					Description = [value]	n/a
Property Type				Occupancy Classification	Occupancy Classification = [value]	
Project Name				Project Identifier	Identifier Label = "Project"	
					Identifier = [value]	n/a
Building ID				Premises Identifier	Identifier Label = "Premises"	
					Identifier = [value]	n/a
Project Audit Date				Project Audit Date	Action Category = "Project"	
					Action Category = "Audit"	
					Date = [value]	Format: YYYY-M
Year Built				Completed Construction Status Date	Construction Status = "Completed"	
					Construction Status Date = [value]	Date Format: YY
Annual HDD				Annual Heating Degree Days Value	Interval Frequency = "Annual"	
					Weather Metric ="Heating degree days"	
					Weather Metric Value = [value]	n/a
Annual CDD				Annual Cooling Degree Days Value	Interval Frequency = "Annual"	
					Weather Metric ="Cooling degree days"	
					Weather Metric Value = [value]	n/a
Gross Floor Area				Gross Floor Area	Floor Area Qualifier = "Gross"	
					Opaque Surface = "Floor"	
					Area = [value]	ft2
Total Conditioned Area				Total Conditioned Area	Interval Measure = "Total"	
					Conditioning Status = "Conditioned"	
					Area = [value]	ft2
Heated Area				Heated Area	Conditioning Status = "Heated"	
					Area = [value]	ft2
Cooled Area				Cooled Area	Conditioning Status = "Cooled"	
					Area = [value]	ft2
Number of Conditioned Floors; Above Grade				Above Grade Conditioned Floor Quantity	Location = "Above Grade "	
					Conditioning Status = "Conditioned"	
					Spatial Unit Type = "Floor"	
					Quantity = [value]	n/a
Number of Conditioned Floors; Below Grade				Below Grade Conditioned Floor Quantity	Location = "Below Grade "	
					Conditioning Status = "Conditioned"	
					Spatial Unit Type = "Floor"	
					Quantity = [value]	n/a
Brief Building Description				Building Description	Premises Level = "Building"	
					Description = [value]	n/a

eAuditPro term	Enumerations	Definition	Unit of Measure	BEDES Term	BEDES Mapping	BEDES Units
Building Photo				NO MAPPING		
Executive Summary				NO MAPPING		
Disclaimer				NO MAPPING		
General				NO MAPPING		
Approach				NO MAPPING		
# Of Bills				Billed To Date Quantity	Temporal Status = "Billed to date"	
					Quantity = [value]	n/a
# Of Meters				Meter Quantity	Control Technology = "Meter"	
					Quantity = [value]	n/a
Energy Type				Energy Resource	Resource = "Energy"	
					Resource = [value]	n/a
Total kBTU				Total Consumption For The Whole Building Resource Value	Energy Metered Premises = "Total consumption for the whole building"	
					Resource Value = [value]	kBtu
Total Cost				Total Consumption For The Whole Building Cost	Energy Metered Premises = "Total consumption for the whole building"	
					Cost = [value]	$
No Utilities Marker				NO MAPPING		
Current Energy Use Intensity				Current Energy Resource Intensity	Temporal Status = "Current"	
					Interval Frequency = "Annual"	
					Resource = "Energy"	
					Resource Intensity = [value]	kBtu/ft2
Current Cost				Current Cost Per Btu	Temporal Status = "Current"	
					Cost = [value]	$/Btu
					Unit Of Measurement = "Custom"	
					Custom Unit Of Measurement = "$/Btu"	
Target Energy Use Intensity				Target Annual Energy Resource Intensity	Temporal Status = "Target"	
					Interval Frequency = "Annual"	
					Resource = "Energy"	
					Resource Intensity = [value]	kBtu/ft2
Calculated Cost Savings				Target Calculated Cost Savings	Temporal Status = "Target"	
					Derivation Method = "Calculated"	
					Cost Savings = [value]	$

eAuditPro term	Enumerations	Definition	Unit of Measure	BEDES Term	BEDES Mapping	BEDES Units
Energy Use Intensity of Similar Sites				Baseline Annual Energy Resource Intensi	Temporal Status = "Baseline"	
					Interval Frequency = "Annual"	
					Resource = "Energy"	
					Resource Intensity = [value]	kBtu/ft2
Assessment				NO MAPPING		
Discussion				NO MAPPING		
Analysis of rate structure				NO MAPPING		
Determination				NO MAPPING		
HVAC System Primary Cooling Affected Area				Cooling Type Percentage Of Total Area	Cooling Type = [value] Chiller Compressor Type = [value] Percentage Of Total Area = [value]	percent
Centrifugal Chiller					Chiller Compressor Type ="Centrifugal"	
Reciprocating Chiller					Chiller Compressor Type ="Reciprocating"	
Screw Chiller					Chiller Compressor Type ="Screw"	
Absorption Chiller					Cooling Type ="Absorption chiller"	
Package DX					Cooling Type ="Packaged unitary direct expansion RTU"	
Split DX					Cooling Type ="Split DX air conditioner"	
Air-Cooled Heat Rejection					NO MAPPING	
Water-Cooled Heat Rejection					NO MAPPING	
Primary Heating Affected Area						
Hot Water Boiler				Hot Water Boiler	Heating Medium = "Hot water"	
					Heating Type = " Boiler"	
Steam Boiler				Steam Boiler	Heating Medium = "Steam"	
					Heating Type = " Boiler"	
Furnace				Furnace	Heating Type = "Furnace"	
Ground-Source Heat Pump				Ground Source Heat Exchanger Split Hea	Heat Pump Sink Source Type = "Ground source heat exchanger"	
					Heating Type = "Split heat pump"	
Air-Source Heat Pump				Outside Air Split Heat Pump	Heat Pump Sink Source Type = "Outside air"	
					Heating Type = "Split heat pump"	
Recirculating Water Source Heat Pump				Recirculation Water Split Heat Pump	Control Strategy = "Recirculation"	
					Heat Pump Sink Source Type = "Custom"	
					Custom Heat Pump Sink Source Type = "Water"	
					Heating Type = "Split heat pump"	
Air Handling Unit/Terminal Systems						
Single Zone				Single Zone	Zoning System Type = " Single zone"	
Multi Zone				Multi Zone	Zoning System Type = " Multi zone"	
Dual Duct				Duct Configuration Dual	Duct Configuration = "Dual"	

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Variable Air Volume				Cooling Delivery Type	Cooling Delivery Type = "VAV terminal box fan "	
					Cooling Delivery Type = "VAV terminal box modulating diffuser"	
					Cooling Delivery Type = "VAV terminal box not fan powered"	
Reheat				Terminal Reheat	Cooling Delivery Type = "Terminal reheat"	
Fan Coil Units				Cooling Delivery Type	Cooling Delivery Type = "Fan coil 2 pipe"	
					Cooling Delivery Type = "Fan coil 4 pipe"	
Unit Ventilators				Ventilation Type		
Packaged Terminal Air Conditioners				Packaged Terminal Air Conditioner	Cooling Type = "Packaged terminal air conditioner"	
Steam/Hot Water Radiators/Convectors				Radiator	Heating Delivery Type = "Radiator"	
Above System(s) w/Economizer				Air Side Economizer Is Present	Air Side Economizer =" Is present"	
				Water Side Economizer Is Present	Water Side Economizer = "Is present"	
Other						
Cogeneration				NO MAPPING		
Energy Monitoring and Control System				Energy Management And Controls System	Control Technology = "Energy management and controls system"	
On-site Generation				Onsite Generated	Resource Boundary = "Onsite"	
					Resource Generation = "Generated"	
Active Solar Equipment				Active Solar Thermal System Collector	Operational Mode = "Active"	
					Energy Generation Technology = "Solar thermal system collector"	
Energy Recovery				Energy Recovery	Efficiency Qualifier = " Energy recovery"	
Thermal Storage				Thermal Energy Storage	Energy Storage Technology = " Thermal energy storage"	
Humidifiers/Dehumidifiers				Other HVAC Type	Other HVAC Type = " Dehumidifier"	
					Other HVAC Type = "Humidifier"	
Desiccant System				Dehumidificaiton Type	Dehumidification Type = " Desiccant Wheel"	
					Dehumidification Type = "Liquid desiccant "	
Evaporative Cooling				Evaporative Cooling Type	Evaporative Cooling Type = "Direct"	
					Evaporative Cooling Type = "Direct indirect"	
					Evaporative Cooling Type = "Indirect"	
Exhaust Systems						
Fume Hoods, Constant Volume				Fume Hood Constant Volume	Process Load Type = "Fume hood"	
					Flow Control Type = "Constant volume"	
Fume Hoods, VAV				Fume Hood Variable Volume	Process Load Type = "Fume hood"	
					Flow Control Type = "Variable volume"	
Kitchen Hoods				Exhaust Hood Kitchen	Other HVAC Type = "Exhaust hood kitchen"	
Toilet				Toilet	Water Fixture Type = "Toilet"	
Locker				NO MAPPING	Occupancy Classification = " Dressing area"	
General				NO MAPPING		
Conclusion				NO MAPPING		
Name				Name Identifier	Identifier Label = "Name"	
					Identifier = [value]	
Location				Location	Location = [value]	
Open on Sunday				Sunday Business	Schedule Day = "Sunday"	
					Schedule Category ="Business"	

eAuditPro term	Enumerations	Definition	Unit of Measure	BEDES Term	BEDES Mapping	BEDES Units
Sunday Open Time - Hour				Sunday Start Time	Schedule Day = "Sunday"	
					Day Start Time = [value]	Format: Military
Sunday Open Time - Min				NO MAPPING		
Sunday Open Time - AM/PM				NO MAPPING		
Sunday Close Time - Hour				Sunday End Time	Schedule Day = "Sunday"	
					Day End Time = [value]	Format: Military
Sunday Close Time - Min				NO MAPPING		
Sunday Close Time - AM/PM				NO MAPPING		
Peak Occupants				Peak Total Occupants Quantity	Occupant Quantity Type = "Peak total occupants"	
					Quantity = [value]	
Average Occupants				Average Residents Quantity	Occupant Quantity Type = "Average residents"	
					Quantity = [value]	
Location Name				Premises Identifier	Identifier Label = "Premises"	
					Identifier = [value]	
Building Shell Characteristics						
Total exposed above-grade wall area				Exterior Above Grade Wall Area	Location = "Exterior"	
					Location = "Above grade"	
					Opaque Surface = "Wall"	
					Area = [value]	ft2
Walls Insulated				NO MAPPING		
Glazing Area				Window Area	Fenestration = "Window"	
					Area = [value]	ft2
Single or Double				Fenestration Glass Layer Description	Fenestration Glass Layer Description = "Single pane"	
					Fenestration Glass Layer Description = "Double pane"	
Roof Area				Roof Area	Opaque Surface = "Roof"	
					Area = [value]	ft2
Roof Insulated				NO MAPPING		
Floor surface area exposed to outdoor cor				Exterior Floor Area	Location = "Exterior"	
					Location = "Floor"	
					Area = [value]	ft2
Floor Insulated				NO MAPPING		
Above-grade wall area common with othe				Above Grade Wall Attached Area	Location = "Above grade"	
					Opaque Surface = "Wall"	
					Vertical Surroundings = "Attached"	
					Area = [value]	ft2
Special Loads & Equipment Inventory						
Equipment Name				Electronic Equipment Type	Electronic Equipment Type = [value]	
Make or Manufacturer				Make	Make = [value]	
				Manufacturer	Manufacturer = [value]	
Model or Format Type				Model Number	Model Number = [value]	
Serial # or I.D. #				Serial Number	Serial Number = [value]	

eAuditPro term	Enumerations	Definition	Unit of Measure	BEDES Term	BEDES Mapping	BEDES Units
System Type				NO MAPPING		
Equipment Function				NO MAPPING		
Fuel Type				Resource	Resource = [value]	
Meter #				Meter Identifier	Identifier Label = "Meter"	
					Identifier = [value]	
Peak Load				On Peak Resource Value	Interval Measure = "On peak"	
					Resource Value = [value]	
Average Load %				Percentage Of Total Installed Capacity	Percentage Of Total Installed Capacity = [value]	
Annual Operating Hours				Annual Operating Hour Quantity	Interval Frequency "Annual"	
					Schedule Category = "Operating"	
					Interval Frequency "Hour"	
					Quantity = [value]	hour
					Unit Of Measure = "hour"	
Equipment Quantity				Quantity	Quantity = [value]	
Input				Input Capacity	Input Capacity = [value]	
Output				Output Capacity	Output Capacity = [value]	
Efficiency				Efficiency Value	Efficiency Value = [value]	percent
Location of equipment				Location	Location = [value]	
Location(s) Served				NO MAPPING		
Image file upload				NO MAPPING		
Fuel Conversion Equipment				NO MAPPING		
Distribution Method				NO MAPPING		
Terminal Type				NO MAPPING		
Equipment Capacity				NO MAPPING		
Control Description and Setting				NO MAPPING		
Operating Periods				NO MAPPING		
Space Temperature Setting and Setback				Room Temperature Setpoint High	Setpoint Type = "Room temperature"	
				Room Temperature Setpoint Low	Setpoint High = [value]	
					Setpoint Low = [value]	
Maintenance Problems				Maintenance Type	Maintenance Type = [value]	
Space Function and System						
Space name				Space Name Identifier	Premises Level = "Space"	
					Identifier Label = "Name"	
					Identifier = [value]	n/a

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Location				Location	Location = [value]	n/a
Function type				Occupancy Classification	Occupancy Classification = [value]	n/a
Conditioned area				Conditioned Area	Conditioning Status = "Conditioned"	
					Area = [value]	ft2
space usage				Space Occupied Annual Hours	Premises Level = "Space"	
					Schedule Category = "Occupied"	
					Interval Frequency = "Annual"	
					Unit Of Measurement = "hours"	hours
Fluorescent %of occupied area				Fluorescent Occupied Percent Of Total Ar	Lamp Type = "Fluorescent"	
					Occupied Status = "Occupied"	
					Percent Of Total Area = [value]	percent
Incandescent %of occupied area				Incandescent Occupied Percent Of Total	Lamp Type = "Incandescent"	
					Occupied Status = "Occupied"	
					Percent Of Total Area = [value]	percent
Mercury Vapor %of occupied area				Mercury Vapor Occupied Percent Of Total	Lamp Label = "Mercury vapor"	
					Occupied Status = "Occupied"	
					Percent Of Total Area = [value]	percent
Sodium %of occupied area				Sodium Vapor Occupied Percent Of Total	Lamp Label = "Sodium vapor"	
					Occupied Status = "Occupied"	
					Percent Of Total Area = [value]	percent
Metal Halide %of occupied area				Metal Halide Occupied Percent Of Total A	Lamp Label = "Metal halide"	
					Occupied Status = "Occupied"	
					Percent Of Total Area = [value]	percent
Other %of occupied area				Other Lamp Type Occupied Percent Of To	Lamp Type = "Other"	
					Occupied Status = "Occupied"	
					Percent Of Total Area = [value]	percent
LED %of occupied area				LED Occupied Percent Of Total Area	Lamp Label = "LED"	
					Occupied Status = "Occupied"	
					Percent Of Total Area = [value]	percent
Lighting type				Lamp Type	Lamp Type = [value]	n/a
Avg installed load				Average Lighting Connected Load Capaci	Interval Measure = "Average"	
					Load Category = "Lighting"	
					Capacity Qualifier = "Connected load"	
					Capacity = [value]	W
					Unit Of Measure = "W"	
design of controls				Control Strategy	Control Strategy = [value]	n/a
switches accessible				NO MAPPING		
special automatic controls				NO MAPPING		
footcandles				fc	Unit Of Measure = "fc"	
% not functioning				Nonfunctional Percent Of Total	Condition = "Nonfunctional"	
					Percent Of Total = [value]	percent
operating problems				NO MAPPING		

eAuditPro term	Enumerations	Definition	Unit of Measure	BEDES Term	BEDES Mapping	BEDES Units
HVAC Type				Heating Type and Cooling Type		
HVAC				DUPLICATE		
Fuel Source				NO MAPPING	Resource = [value]	
Fuel Conversion Equipment				NO MAPPING		
Distribution Method				NO MAPPING		
Terminal Type				NO MAPPING		
Equipment Capacity				NO MAPPING		
Control Description / Setting				NO MAPPING		
Operating Periods				NO MAPPING		
Temperature Setting / Setback				NO MAPPING		
Operating Problems				NO MAPPING		
Unoccupied Setback				NO MAPPING		
Shutdown of AHUs				NO MAPPING		
Shutdown of Exhaust Fans				NO MAPPING		
Shutdown of Chillers				NO MAPPING		
Shutdown of Boilers				NO MAPPING		
Shutdown of Custom Field				NO MAPPING		
Envelope Characteristics						
Construction Code				Building Energy Code Or Standard	Building Energy Code Or Standard = [value]	
Label				NO MAPPING		
R-Value				R Value	R Value = [value]	hr·ft2·°F/Btu
Glass shading Coefficient				Solar Heat Gain Coefficient	Solar Heat Gain Coefficient = [value]	
Area				Area	Area = [value]	ft2
Rebates and Incentives						
Description				Incentive Description	Funding Source = "Incentive"	
					Description = [value]	n/a
Amount				Incentive Funding Amount	Funding Source = "Incentive"	
					Funding Amount = [value]	$
Buidling Revisions						
Type				NO MAPPING		

eAuditPro term	Enumerations	Definition	Unit of Measure	BEDES Term	BEDES Mapping	BEDES Units
Description				Description	Description = [value]	n/a
image field				NO MAPPING		
Operation and Maintenance						
Title				NO MAPPING		
Description				Description	Description = [value]	n/a
image file				NO MAPPING		
ECMs						
Name				Measure Identifier	Action Category = "Measure"	
					Identifier = [value]	n/a
Equipment Name				Technology Category	Technology Category = [value]	
Location				Location	Location = [value]	
Special Load				End Use	End Use = [value]	
System Type				NO MAPPING		
Detailed system				NO MAPPING		
ECM Action				Action Category	Action Category = [value]	
Material Costs				Material Cost	Cost Attribution = "Material"	
					Cost = [value]	$
Labor Costs				Labor Cost	Cost Attribution = "Labor"	
					Cost = [value]	$
Contract Costs				Management And Administration Cost	Cost Attribution = "Management and administration"	
					Cost = [value]	$
Utility Costs				Utility Cost	Contact Label = "Utility"	
					Cost = [value]	$
Other Costs				Other Cost	Cost Attribution = "Other"	
					Cost = [value]	$
Overview				NO MAPPING		
Current Situation				NO MAPPING		
Descrbied Proposed Solution				NO MAPPING		
Before Seconds				Pre Retrofit Interval Duration	Temporal Status = "Pre retrofit" Interval Duration = [value]	s
Before Minutes				NO MAPPING		
Before Hours				NO MAPPING		
Before Days				NO MAPPING		
Before Weeks				NO MAPPING		

eAuditPro term	Enumerations	Definition	Unit of Measure	BEDES Term	BEDES Mapping	BEDES Units
Before Annual				NO MAPPING		
After Seconds				Post Retrofit Interval Duration	Temporal Status = "Post retrofit" Interval Duration = [value]	s
After Minutes				NO MAPPING		
After Hours				NO MAPPING		
After Days				NO MAPPING		
After Weeks				NO MAPPING		
After Annual				NO MAPPING		
ECM Type				Action Category and/or Technology Category		
Before Power Per Lamp				Pre Retrofit Watts Per Lamp Consumption	Temporal Status = "Pre retrofit"	
					Consumption Rate Type = " Watts per lamp"	
					Consumption Rate = [value]	W
Before Ballast				Pre Retrofit Ballast Identifier	Temporal Status = "Pre retrofit"	
					Lighting Component = "Ballast"	
					Identifier = [value]	n/a
Before Lamps per fixture				Pre Retrofit Lamps Fixture Quantity	Temporal Status = "Pre retrofit"	
					Lighting Component = "Lamps"	
					Lighting Component = "Fixture "	
					Quantity = [value]	n/a
Before Units				Pre Retrofit Quantity	Temporal Status = "Pre retrofit"	
					Quantity = [value]	n/a
After Power Per Lamp				Post Retrofit Watts Per Lamp Consumption	Temporal Status = "Post retrofit"	
					Consumption Rate Type = " Watts per lamp"	
					Consumption Rate = [value]	W
After Ballast				Post Retrofit Ballast Identifier	Temporal Status = "Post retrofit"	
					Lighting Component = "Ballast"	
					Identifier = [value]	n/a
After Lamps per fixture				Post Retrofit Lamps Fixture Quantity	Temporal Status = "Post retrofit"	
					Lighting Component = "Lamps"	
					Lighting Component = "Fixture "	
					Quantity = [value]	n/a
After Units				Post Retrofit Quantity	Temporal Status = "Post retrofit"	
					Quantity = [value]	n/a
Calc before				Pre Retrofit Calculated Resource Value	Temporal Status = "Pre retrofit"	

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					Derivation Method = "Calculated"	
					Resource Value = [value]	?
Calc After				Post Retrofit Calculated Resource Value	Temporal Status = "Post retrofit"	
					Derivation Method = "Calculated"	
					Resource Value = [value]	?
Total engergy savings				Resource Savings	Resource Savings = [value]	Btu
Total dollars saved				Cost Savings	Cost Savings = [value]	$