WHAT IS CLAIMED:

1. A building system comprising one or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

receive an event from an event source, the event indicating a data value associated with the event source occurring at a particular time;

identify contextual data of a database that provides a contextual description of the event;

generate an enriched event by enriching the event with the contextual data, the enriched event including the data value, the particular time, and the contextual data; and

provide the enriched event to a consuming application configured to operate based on the enriched event.

2. The building system of claim 1, wherein the instructions cause the one or more processors to:

retrieve one or more schemas from a schema database, the one or more schemas indicating available schema formats for events;

determine whether a schema that the event is formatted in matches the one or more schemas;

generate the enriched event in response to determining that the schema that the event is formatted in matches the one or more schemas; and

perform at least one of:

adding the event into a dead letter storage in response to a determination that the schema that the event is formatted in does not match the one or more schemas; or

adding the schema that the event is formatted in into the schema database in response to determining that the schema that the event is formatted in does not match the one or more schemas and in response to determining that the building system is operating in a discovery mode to discover new schemas.

3. The building system of claim 1, wherein the instructions cause the one or more processors cause the enriched event to be added to a topic subscribed to by the consuming application.

4. The building system of claim 1, wherein the instructions cause the one or more processors to persist the enriched event in an event database.

5. The building system of claim 1, wherein the instructions cause the one or more processors to identify the contextual data based on one or more enrichment rules associated with the consuming application;

wherein the instructions cause the one or more processors to:

identify second contextual data of the database based on one or more second enrichment rules associated with a second consuming application;

generate a second enriched event by enriching the event with the second contextual data, the data value, and the particular time; and

provide the second enriched event to the second consuming application.

6. The building system of claim 1, wherein the event is received from a piece of building equipment of a building;

wherein the instructions cause the one or more processors to identify the contextual data by searching a graph projection that includes the contextual description of the piece of building equipment.

7. The building system of claim 6, wherein the graph projection includes a plurality of nodes and a plurality of edges;

wherein the plurality of nodes represent entities of the building and the plurality of edges represent relationships between the entities of the building;

wherein the plurality of nodes include a node representing the piece of building equipment;

wherein the instructions cause the one or more processors to identify the contextual data by identifying one or more nodes of the plurality of nodes related to the node representing the piece of building equipment based on one or more edges of the plurality of edges between the node representing the piece of building equipment and the one or more nodes.

8. The building system of claim 6, wherein the database is a digital twin of the building, wherein the contextual data includes one or more capabilities of the piece of building equipment.

9. The building system of claim 6, wherein the contextual description includes at least one of:

a location where the piece of building equipment is located;

another piece of building equipment related to the piece of building equipment;

a point of the piece of building equipment; and

a person associated with the piece of building equipment.

10. The building system of claim 9, wherein the location is at least one of the building that the piece of building equipment is located in or a space that the piece of building equipment is located in.

11. A method comprising:

receiving, by a processing circuit, an event from a piece of building equipment of a building, the event indicating a data value associated with the piece of building equipment occurring at a particular time;

identifying, by the processing circuit, contextual data of a database that provides a contextual description of the event;

generating, by the processing circuit, an enriched event by enriching the event with the contextual data, the enriched event including the data value, the particular time, and the contextual data; and

providing, by the processing circuit, the enriched event to a consuming application configured to operate based on the enriched event.

12. The method of claim 11, further comprising:

retrieving, by the processing circuit, one or more schemas from a schema database, the one or more schemas indicating available schema formats for events;

determining, by the processing circuit, whether a schema that the event is formatted in matches the one or more schemas;

generating, by the processing circuit, the enriched event in response to determining that the schema that the event is formatted in matches the one or more schemas; and

performing, by the processing circuit, at least one of:

adding the event into a dead letter storage in response to a determination that the schema that the event is formatted in does not match the one or more schemas; or

adding the schema that the event is formatted in into the schema database in response to determining that the schema that the event is formatted in does not match the one or more schemas and in response to determining that the building system is operating in a discovery mode to discover new schemas.

13. The method of claim 11, further comprising:

causing, by the processing circuit, the enriched event to be added to a topic subscribed to by the consuming application.

14. The method of claim 11, further comprising:

persisting, by the processing circuit, the enriched event in an event database.

15. The method of claim 11, wherein identifying, by the processing circuit, the contextual data is based on one or more enrichment rules associated with the consuming application;

wherein the method further comprises:

identifying, by the processing circuit, second contextual data of the database based on one or more second enrichment rules associated with a second consuming application;

generating, by the processing circuit, a second enriched event by enriching the event with the second contextual data, the data value, and the particular time; and

providing, by the processing circuit, the second enriched event to the second consuming application.

16. The method of claim 11, further comprising identifying, by the processing circuit, the contextual data by searching a graph projection that includes the contextual description of the piece of building equipment.

17. The method of claim 16, wherein the graph projection includes a plurality of nodes and a plurality of edges;

wherein the plurality of nodes represent entities of the building and the plurality of edges represent relationships between the entities of the building;

wherein the plurality of nodes include a node representing the piece of building equipment;

wherein identifying, by the processing circuit, the contextual data comprises identifying one or more nodes of the plurality of nodes related to the node representing the piece of building equipment based on one or more edges of the plurality of edges between the node representing the piece of building equipment and the one or more nodes.

18. The method of claim 16, wherein the contextual data includes one or more capabilities of the piece of building equipment.

19. The method of claim 16, wherein the contextual description includes at least one of:

a location where the piece of building equipment is located;

another piece of building equipment related to the piece of building equipment;

a point of the piece of building equipment; and

a person associated with the piece of building equipment.

20. A building system comprising:

one or more memory devices having instructions thereon; and

one or more processors configured to execute the instructions causing the one or more processors to:

receive an event from a piece of building equipment of a building, the event indicating a data value associated with the piece of building equipment occurring at a particular time;

identify contextual data of a digital twin of the building that provides a contextual description of the event;

generate an enriched event by enriching the event with the contextual data, the enriched event including the data value, the particular time, and the contextual data; and

provide the enriched event to a consuming application configured to operate based on the enriched event.

21. A building system of a building comprising one or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

receive a modification to a graph, the graph comprising a plurality of nodes and a plurality of edges between the plurality of nodes, the plurality of nodes representing entities of the building and the plurality of edges representing relationships between the entities of the building;

generate a change feed event, the change feed event recording the modification to the graph; and

add the change feed event to a change feed comprising a plurality of change feed events representing modifications to the graph at a plurality of different times.

22. The building system of claim 21, wherein the graph is digital twin of the building, wherein the entities of the building are at least one of building equipment, locations of the building, users of the building, and events of the building.

23. The building system of claim 21, wherein the instructions cause the one or more processors to:

construct the graph at a plurality of points in time including a first time and a second time by:

selecting a first set of the plurality of change feed events occurring up to the first time;

generating the graph at the first time based on the first set of the plurality of change feed events;

selecting a second set of the plurality of change feed events occurring up to the second time; and

generating the graph at the second time based on the second set of the plurality of change feed events.

24. The building system of claim 21, wherein the modification is at least one of:

adding a new node to the plurality of nodes of the graph;

adding a new edge to the plurality of edges of the graph;

deleting an existing node of the plurality of nodes of the graph;

deleting an existing edge of the plurality of edges of the graph;

modifying the existing node of the plurality of nodes of the graph; or

modifying the existing edge of the plurality of edges of the graph.

25. The building system of claim 21, wherein the instructions cause the one or more processors to:

communicate the change feed event of the change feed to one or more consuming applications.

26. The building system of claim 25, wherein the instructions cause the one or more processors to:

add the change feed event to a change feed topic, wherein the one or more consuming applications are subscribed to the change feed topic and receive the change feed event in response to the change feed event being added to the change feed topic.

27. The building system of claim 25, wherein the one or more consuming applications update the graph stored by the one or more consuming applications based on the change feed event.

28. A method comprising:

receiving, by a processing circuit, a modification to a graph, the graph comprising a plurality of nodes and a plurality of edges between the plurality of nodes, the plurality of nodes representing entities of a building and the plurality of edges representing relationships between the entities of the building;

generating, by the processing circuit, a change feed event, the change feed event recording the modification to the graph; and

adding, by the processing circuit, the change feed event to a change feed comprising a plurality of change feed events representing modifications to the graph at a plurality of different times.

29. The method of claim 28, wherein the entities of the building are at least one of building equipment, locations of the building, users of the building, and events of the building.

30. The method of claim 28, further comprising:

constructing, by the processing circuit, the graph at a plurality of points in time including a first time and a second time by:

selecting a first set of the plurality of change feed events occurring up to the first time;

generating the graph at the first time based on the first set of the plurality of change feed events;

selecting a second set of the plurality of change feed events occurring up to the second time; and

generating the graph at the second time based on the second set of the plurality of change feed events.

31. The method of claim 28, wherein the modification is at least one of:

adding a new node to the plurality of nodes of the graph;

adding a new edge to the plurality of edges of the graph;

deleting an existing node of the plurality of nodes of the graph;

deleting an existing edge of the plurality of edges of the graph;

modifying the existing node of the plurality of nodes of the graph; or

modifying the existing edge of the plurality of edges of the graph.

32. The method of claim 28, further comprising:

communicating, by the processing circuit, the change feed event of the change feed to one or more consuming applications.

33. The method of claim 32, further comprising:

adding, by the processing circuit, the change feed event to a change feed topic, wherein the one or more consuming applications are subscribed to the change feed topic and receive the change feed event in response to the change feed event being added to the change feed topic.

34. The method of claim 32, wherein the one or more consuming applications update the graph stored by the one or more consuming applications based on the change feed event.

35. A building system of a building comprising:

one or more memory devices having instructions thereon; and

one or more processors configure to execute the instructions causing the one or more processors to:

receive a modification to a digital twin, the digital twin comprising a plurality of nodes and a plurality of edges between the plurality of nodes, the plurality of nodes representing entities of the building and the plurality of edges representing relationships between the entities of the building;

generate a change feed event, the change feed event recording the modification to the digital twin; and

add the change feed event to a change feed comprising a plurality of change feed events representing modifications to the digital twin at a plurality of different times.

36. The building system of claim 35, wherein the entities of the building are at least one of building equipment, locations of the building, users of the building, and events of the building.

37. The building system of claim 35, wherein the instructions cause the one or more processors to:

construct the digital twin at a plurality of points in time including a first time and a second time by:

selecting a first set of the plurality of change feed events occurring up to the first time;

generating the digital twin at the first time based on the first set of the plurality of change feed events;

selecting a second set of the plurality of change feed events occurring up to the second time; and

generating the digital twin at the second time based on the second set of the plurality of change feed events.

38. The building system of claim 35, wherein the modification is at least one of:

adding a new node to the plurality of nodes of the digital twin;

adding a new edge to the plurality of edges of the digital twin;

deleting an existing node of the plurality of nodes of the digital twin;

deleting an existing edge of the plurality of edges of the digital twin;

modifying the existing node of the plurality of nodes of the digital twin; or

modifying the existing edge of the plurality of edges of the digital twin.

39. The building system of claim 35, wherein the instructions cause the one or more processors to:

communicate the change feed event of the change feed to one or more consuming applications.

40. The building system of claim 39, wherein the instructions cause the one or more processors to:

add the change feed event to a change feed topic, wherein the one or more consuming applications are subscribed to the change feed topic and receive the change feed event in response to the change feed event being added to the change feed topic.

41. A building system of a building comprising one or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

identify a capability of an entity in a building graph, the building graph including a plurality of nodes and a plurality of edges, the plurality of nodes representing entities of the

building including the entity and the capability, the plurality of edges representing relationships between the entities of the building and the capability, wherein a first node of the plurality of nodes represents the entity and a second node of the plurality of nodes related to the first node by one or more edges of the plurality of edges represents the capability;

receive a command to perform an operation associated with the entity, the operation associated with the capability of the entity; and

provide the command to perform the operation associated with the entity to an operating system.

42. The building system of claim 41, wherein the building graph is a digital twin, wherein the instructions cause the one or more processors to identify the capability of the entity by:

identifying the first node of the plurality of nodes of the building graph representing the entity; and

identifying at least one of one or more nodes or the one or more edges between the first node and the second node representing the capability of the entity.

43. The building system of claim 41, wherein the entity is a piece of building equipment of the building;

wherein the capability is a control operation that the piece of building equipment is configured to perform.

44. The building system of claim 41, wherein the entity is a user of the building;

wherein the capability is an action associated with the user that a system is configured to perform.

45. The building system of claim 41, wherein the instructions cause the one or more processors to receive the command to perform the operation associated with the entity from a requesting system;

wherein the instructions cause the one or more processors to identify whether the requesting system has a policy to make the command to perform the operation based on the building graph, wherein the building graph indicates the policy to make the command;

wherein the instructions cause the one or more processors to provide the command to perform the operation associated with the entity to the operating system in response to identifying that the requesting system has the policy to make the command.

46. The building system of claim 41, wherein the instructions cause the one or more processors to identify whether a requesting system has a policy to make the command to perform the operation based on the building graph by:

identifying a third node of the plurality of nodes representing the requesting system; and

identifying one or more particular edges of the plurality of edges between the third node and a fourth node of the plurality of nodes representing the policy to make the command.

47. The building system of claim 41, wherein the instructions cause the one or more processors to:

determine that the operating system is a piece of building equipment of the building;

identify a device hub configured to facilitate messaging between the building system and the piece of building equipment based on the building graph, wherein the plurality of nodes includes a node representing the device hub; and

send the command to the piece of building equipment through the device hub.

48. The building system of claim 41, wherein the entity is a piece of building equipment;

wherein the instructions cause the one or more processors to:

determine that the operating system is an external system separate from the building system;

identify a connection broker configured to facilitate a connection between the building system and the external system, wherein the plurality of nodes includes a node representing the connection broker and the external system; and

send the command to the piece of building equipment through the connection broker.

49. A method comprising:

identifying, by a processing circuit, a capability of an entity in a building graph of a building, the building graph including a plurality of nodes and a plurality of edges, the plurality of nodes representing entities of the building including the entity and the capability, the plurality of edges representing relationships between the entities of the building and the capability, wherein a first node of the plurality of nodes represents the entity and a second node of the plurality of nodes related to the first node by one or more edges of the plurality of edges represents the capability;

receiving, by the processing circuit, a command to perform an operation associated with the entity, the operation associated with the capability of the entity; and

providing, by the processing circuit, the command to perform the operation associated with the entity to an operating system.

50. The method of claim 49, wherein identifying, by the processing circuit, the capability of the entity comprises:

identifying the first node of the plurality of nodes of the building graph representing the entity; and

identifying at least one of one or more nodes or the one or more edges between the first node and the second node representing the capability of the entity.

51. The method of claim 49, wherein the entity is a piece of building equipment of the building;

wherein the capability is a control operation that the piece of building equipment is configured to perform.

52. The method of claim 49, wherein the entity is a user of the building;

wherein the capability is an action associated with the user that a system is configured to perform.

53. The method of claim 49, wherein receiving, by the processing circuit, the command to perform the operation associated with the entity includes receiving the command from a requesting system;

wherein the method further includes identifying, by the processing circuit, whether the requesting system has a policy to make the command to perform the operation based on the building graph, wherein the building graph indicates the policy to make the command;

wherein the method further includes providing, by the processing circuit, the command to perform the operation associated with the entity to the operating system in response to identifying that the requesting system has the policy to make the command.

54. The method of claim 49, further comprising identifying, by the processing circuit, whether a requesting system has a policy to make the command to perform the operation based on the building graph by:

identifying a third node of the plurality of nodes representing the requesting system; and

identifying one or more particular edges of the plurality of edges between the third node and a fourth node of the plurality of nodes representing the policy to make the command.

55. The method of claim 49, further comprising:

determining, by the processing circuit, that the operating system is a piece of building equipment of the building;

identifying, by the processing circuit, a device hub configured to facilitate messaging between the processing circuit and the piece of building equipment based on the building graph, wherein the plurality of nodes includes a node representing the device hub; and

sending, by the processing circuit, the command to the piece of building equipment through the device hub.

56. The method of claim 49, wherein the entity is a piece of building equipment;

wherein the method further comprises:

determining, by the processing circuit, that the operating system is an external system separate from the building system;

identifying, by the processing circuit, a connection broker configured to facilitate a connection between the building system and the external system, wherein the plurality of nodes includes a node representing the connection broker and the external system; and

sending, by the processing circuit, the command to the piece of building equipment through the connection broker.

57. One or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

identify a capability of an entity in a digital twin of a building, the digital twin including a plurality of nodes and a plurality of edges, the plurality of nodes representing entities of the building including the entity and the capability, the plurality of edges representing relationships between the entities of the building and the capability, wherein a first node of the plurality of nodes represents the entity and a second node of the plurality of nodes related to the first node by one or more edges of the plurality of edges represents the capability;

receive a command to perform an operation associated with the entity, the operation associated with the capability of the entity; and

provide the command to perform the operation associated with the entity to an operating system.

58. The one or more memory devices of claim 57, wherein the instructions cause the one or more processors to identify the capability of the entity by:

identifying the first node of the plurality of nodes of the digital twin representing the entity; and

identifying at least one of one or more nodes or the one or more edges between the first node and the second node representing the capability of the entity.

59. The one or more memory devices of claim 57, wherein the entity is a piece of building equipment of the building;

wherein the capability is a control operation that the piece of building equipment is configured to perform.

60. The one or more memory devices of claim 57, wherein the entity is a user of the building;

wherein the capability is an action associated with the user that a system is configured to perform.

~~61. A building system of a building comprising one or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:~~

~~receive a command to perform an action for an entity;~~

~~identify a service configured to perform the action based on a building graph, the building graph including a plurality of nodes and a plurality of edges, wherein the plurality of nodes represent entities of the building, the service, and one or more other services, wherein the plurality of edges represent relationships between the entities and communication actions of the service with the one or more other services; and~~

~~cause the service to perform the action by causing the service to perform one or more communication actions with the one or more other services indicated by the building graph.~~

~~62. The building system of claim 61, wherein the communication actions are application programming interface (API) calls to the one or more other services.~~

~~63. The building system of claim 61, wherein the building graph is a digital twin, wherein the entities of the building are at least one of building equipment, locations of the building, users of the building, and events of the building.~~

~~64. The building system of claim 61, wherein a first node of the plurality of nodes represents the service and a second node of the plurality of nodes represents a second service of the one or more other services;~~

~~wherein an edge of the plurality of edges relates the first node to the second node and indicates a communication action that the service can make to the second service.~~

~~65. The building system of claim 61, wherein the service is a connection broker configured to broker a connection between the building system and an external system separate from the building system;~~

~~wherein the action is an operation performed by the external system;~~

~~wherein the one or more communication actions are API calls that the connection broker makes with the one or more other services to cause the external system to perform the operation.~~

~~66. The building system of claim 61, wherein the service is a device hub configured to handle messages between the building system and a piece of building equipment;~~

~~wherein the action is an operation performed by the piece of building equipment;~~

~~wherein the one or more communication actions are API calls that the device hub makes with the one or more other services to cause the piece of building equipment to perform the operation.~~

~~67. The building system of claim 61, wherein the instructions cause the one or more processors to:~~

~~identify a capability of the entity in the building graph, the capability indicating that the entity can perform the action; and~~

~~cause the service to perform the action based on the one or more communication actions indicated by the building graph responsive to identifying the capability of the entity.~~

~~68. The building system of claim 61, wherein the instructions cause the one or more processors to receive the command to perform the action from a requesting system;~~

~~wherein the instructions cause the one or more processors to identify whether the requesting system has a policy to make the command to perform the action based on the building graph, wherein the building graph indicates the policy to make the command;~~

~~wherein the instructions cause the one or more processors to cause the service to perform the action in response to identifying the policy to make the command.~~

~~69. The building system of claim 61, wherein the instructions cause the one or more processors to identify whether a requesting system that the building system receives the request to perform the command from has a policy to make the command by:~~

~~identifying a first node of the plurality of nodes representing the requesting system in the building graph; and~~

identifying one or more edges between the first node and a second node of the plurality of nodes representing the policy to make the command.

70. A method comprising:

receiving, by a processing circuit, a command to perform an action for an entity;

identifying, by the processing circuit, a service configured to perform the action based on a building graph, the building graph including a plurality of nodes and a plurality of edges, wherein the plurality of nodes represent entities of the building, the service, and one or more other services, wherein the plurality of edges represent relationships between the entities and communication actions of the service with the one or more other services; and

causing, by the processing circuit, the service to perform the action by causing the service to perform one or more communication actions with the one or more other services indicated by the building graph.

71. The method of claim 70, wherein the communication actions are application programming interface (API) calls to the one or more other services.

72. The method of claim 70, wherein the entities of the building are at least one of building equipment, locations of the building, users of the building, and events of the building.

73. The method of claim 70, wherein a first node of the plurality of nodes represents the service and a second node of the plurality of nodes represents a second service of the one or more other services;

wherein an edge of the plurality of edges relates the first node to the second node and indicates a communication action that the service can make to the second service.

74. The method of claim 70, wherein the service is a connection broker configured to broker a connection between the building system and an external system separate from the building system;

wherein the action is an operation performed by the external system;

wherein the one or more communication actions are API calls that the connection broker makes with the one or more other services to cause the external system to perform the operation.

75. The method of claim 70, wherein the service is a device hub configured to handle messages between the building system and a piece of building equipment;

wherein the action is an operation performed by the piece of building equipment;

wherein the one or more communication actions are API calls that the device hub makes with the one or more other services to cause the piece of building equipment to perform the operation.

76. The method of claim 70, further comprising:

identifying, by the processing circuit, a capability of the entity in the building graph, the capability indicating that the entity can perform the action; and

causing, by the processing circuit, the service to perform the action based on the one or more communication actions indicated by the building graph responsive to identifying the capability of the entity.

77. The building system of claim 70, further comprising receiving, by the processing circuit, the command to perform the action from a requesting system;

wherein the method further comprises identifying, by the processing circuit, whether the requesting system has a policy to make the command to perform the action based on the building graph, wherein the building graph indicates the policy to make the command;

wherein the method further comprises causing, by the processing circuit, the service to perform the action in response to identifying the policy to make the command.

78. The method of claim 70, further comprising identifying, by the processing circuit, whether a requesting system that the building system receives the request to perform the command from has a policy to make the command comprises:

identifying a first node of the plurality of nodes representing the requesting system in the building graph; and

identifying one or more edges between the first node and a second node of the plurality of nodes representing the policy to make the command.

79. One or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

receive a command to perform an action for an entity;

identify a service configured to perform the action based on a digital twin, the digital twin including a plurality of nodes and a plurality of edges, wherein the plurality of nodes represent entities of the building, the service, and one or more other services, wherein the plurality of edges represent relationships between the entities and communication actions of the service with the one or more other services; and

cause the service to perform the action by causing the service to perform one or more communication actions with the one or more other services indicated by the digital twin.

80. The one or more memory devices of claim 79, wherein the communication actions are application programming interface (API) calls to the one or more other services.

81. A building system of a building comprising one or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

receive a request to access a portion of a building graph of the building from a system, the building graph including a plurality of nodes and a plurality of edges, the plurality of nodes representing entities of the building and the plurality of edges representing relationships between the entities of the building;

determine whether the system has access to the portion of the building graph based on a policy indicated by the plurality of nodes and edges of the building graph; and

provide the portion of the building graph to the system in response to a determination that the system has access to the portion of the building graph.

82. The building system of claim 81, wherein the building graph is a digital twin, wherein the building graph includes a first node representing the policy;

wherein the building graph includes a second node indicating a read policy to read events related to the first node by a first edge of the plurality of edges;

wherein the building graph includes a third node indicating a command policy to send commands related to the first node by a second edge of the plurality of edges.

83. The building system of claim 81, wherein the instructions cause the one or more processors to determine whether the system has access to the portion of the building graph based on the policy by:

identifying a first node of the plurality of nodes representing the system; and

identifying an edge of the plurality of edges between the first node and a second node representing the policy to access the portion of the building graph.

84. The building system of claim 81, wherein the policy to access the portion of the building graph is an access policy to access events associated with a particular entity;

wherein the plurality of nodes include a first node representing the policy and a second node representing the particular entity;

wherein an edge of the plurality of edges links the first node to the second node.

85. The building system of claim 84, wherein the policy to access the events associated with the particular entity is a particular access policy to access other events of other entities, the other entities related to the particular entity;

wherein the plurality of nodes include other nodes representing the other entities;

wherein the plurality of edges include one or more edges relating the other nodes to the second node representing the particular entity.

86. The building system of claim 81, wherein the instructions cause the one or more processors to:

receive a command to perform an action for an entity from a requesting system;

identify whether the system has a command policy to make the command to perform the action based on the building graph by:

identifying a first node of the plurality of nodes representing the requesting system; and

identifying one or more edges between the first node and a second node of the plurality of nodes representing the command policy to make the command.

87. The building system of claim 86, wherein the instructions cause the one or more processors to:

identify a capability of the entity in the building graph; and

provide the command to perform the action associated with the entity to an operating system in response to identifying the capability.

88. The building system of claim 87, wherein the instructions cause the one or more processors to identify the capability of the entity by:

identifying a node of the plurality of nodes of the building graph representing the entity; and

identifying at least one of one or more nodes or one or more particular edges between the node and a third node representing the capability of the entity.

89. The building system of claim 87, wherein the entity is a piece of building equipment of the building;

wherein the capability is an operation that the piece of building equipment is configured to perform.

90. A method comprising:

receiving, by a processing circuit, a request to access a portion of a building graph of a building from a system, the building graph including a plurality of nodes and a plurality of edges, the plurality of nodes representing entities of the building and the plurality of edges representing relationships between the entities of the building;

determining, by the processing circuit, whether the system has access to the portion of the building graph based on a policy indicated by the plurality of nodes and edges of the building graph; and

providing, by the processing circuit, the portion of the building graph to the system in response to a determination that the system has access to the portion of the building graph.

91. The method of claim 90, wherein the building graph includes a first node representing the policy;

wherein the building graph includes a second node indicating a read policy to read events related to the first node by a first edge of the plurality of edges;

wherein the building graph includes a third node indicating a command policy to send commands related to the first node by a second edge of the plurality of edges.

92. The method of claim 90, wherein determining, by the processing circuit, whether the system has access to the portion of the building graph based on the policy comprises:

identifying a first node of the plurality of nodes representing the system; and

identifying an edge of the plurality of edges between the first node and a second node representing the policy to access the portion of the building graph.

93. The method of claim 90, wherein the policy to access the portion of the building graph is an access policy to access events associated with a particular entity;

wherein the plurality of nodes include a first node representing the policy and a second node representing the particular entity;

wherein an edge of the plurality of edges links the first node to the second node.

94. The method of claim 93, wherein the policy to access the events associated with the particular entity is a particular access policy to access other events of other entities, the other entities related to the particular entity;

wherein the plurality of nodes include other nodes representing the other entities;

wherein the plurality of edges include one or more edges relating the other nodes to the second node representing the particular entity.

95. The method of claim 90, further comprising:

receiving, by the processing circuit, a command to perform an action for an entity from a requesting system;

identifying, by the processing circuit, whether the system has a command policy to make the command to perform the action based on the building graph by:

identifying a first node of the plurality of nodes representing the requesting system; and

identifying one or more edges between the first node and a second node of the plurality of nodes representing the command policy to make the command.

96. The method of claim 95, further comprising:

identifying, by the processing circuit, a capability of the entity in the building graph; and

providing, by the processing circuit, the command to perform the action associated with the entity to an operating system in response to identifying the capability.

97. The method of claim 96, wherein identifying, by the processing circuit, the capability of the entity comprises:

identifying a node of the plurality of nodes of the building graph representing the entity; and

identifying at least one of one or more nodes or one or more particular edges between the node and a third node representing the capability of the entity.

98. The method of claim 96, wherein the entity is a piece of building equipment of the building;

wherein the capability is an operation that the piece of building equipment is configured to perform.

99. One or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

receive a request to access a portion of a building graph of a building from a system, the building graph including a plurality of nodes and a plurality of edges, the plurality of nodes

~~representing entities of the building and the plurality of edges representing relationships between the entities of the building, wherein the building graph is a digital twin;~~

~~determine whether the system has access to the portion of the building graph based on a policy indicated by the plurality of nodes and edges of the building graph; and~~

~~provide the portion of the building graph to the system in response to a determination that the system has access to the portion of the building graph.~~

~~100. The one or more memory devices of claim 99, wherein the building graph includes a first node representing the policy;~~

~~wherein the building graph includes a second node indicating a read policy to read events related to the first node by a first edge of the plurality of edges;~~

~~wherein the building graph includes a third node indicating a command policy to send commands related to the first node by a second edge of the plurality of edges.~~

~~101. A building system of a building comprising one or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:~~

~~retrieve projection rules for generating a building graph projection;~~

~~retrieve a plurality of entities representing elements of the building and a plurality of relationships between the plurality of entities representing relationships between the plurality of entities;~~

~~construct the building graph projection including a plurality of nodes and a plurality of edges based on the plurality of entities, the plurality of relationships, and the projection rules; and~~

~~perform one or more operations based on the building graph projection.~~

~~102. The building system of claim 101, wherein the building graph projection is a digital twin, wherein the instructions cause the one or more processors to construct the building graph projection by:~~

~~generating one node of the plurality of nodes for each of the plurality of entities;~~

~~generate an edge of the plurality of edges for each relationship of the plurality of relationships; and~~

~~connecting the edge from a first node of the plurality of nodes to a second node of the plurality of nodes to illustrate a particular relationship of the plurality of relationships between a first entity of the plurality of entities and a second entity of the plurality of entities.~~

~~103. The building system of claim 101, wherein the projection rules indicate permissions for a subscriber, wherein the permissions identify a set of the plurality of entities and a set of the plurality of relationships;~~

~~wherein the instructions cause the one or more processors to construct the building graph projection based on the set of the plurality of entities and the set of the plurality of relationships.~~

~~104. The building system of claim 101, wherein the projection rules indicate an ontology indicating allowed relationships between types of entities;~~

~~wherein the instructions cause the one or more processors to construct the building graph projection based on the types of entities and the allowed relationships between the types of entities.~~

~~105. The building system of claim 101, wherein the instructions cause the one or more processors to:~~

~~retrieve, for a subscriber, the projection rules for generating the building graph projection from a plurality of graph projection rules stored in a database, wherein the plurality of graph projection rules associated with a plurality of subscribers.~~

~~106. The building system of claim 105, wherein the instructions cause the one or more processors to:~~

~~retrieve second projection rules for a second subscriber of the plurality of subscribers;~~

~~construct a second building graph projection including a second plurality of nodes and a second plurality of edges based on the at least some of the plurality of entities, at least some of the plurality of relationships, and the second projection rules; and~~

~~store the building graph projection and the second building graph projection in a graph projection database.~~

~~107. The building system of claim 101, wherein the instructions cause the one or more processors to:~~

~~receive a modification to the building graph projection;~~

~~generate a change feed event, the change feed event recording the modification to the building graph projection; and~~

~~add the change feed event to a change feed comprising a plurality of change feed events representing modifications to the building graph projection at a plurality of different times.~~

~~108. The building system of claim 107, wherein the modification is at least one of:~~

~~adding a new node to the plurality of nodes of the building graph projection;~~

~~adding a new edge to the plurality of edges of the building graph projection;~~

~~deleting an existing node of the plurality of nodes of the building graph projection;~~

~~deleting an existing edge of the plurality of edges of the building graph projection;~~

~~modifying the existing node of the plurality of nodes of the building graph projection; or~~

~~modifying the existing edge of the plurality of edges of the building graph projection.~~

~~109. The building system of claim 101, wherein the instructions cause the one or more processors to:~~

~~receive an event from a piece of building equipment of the building, the event indicating a data value associated with the piece of building equipment occurring at a particular time;~~

~~identify contextual data of a database that provides a contextual description of the event;~~

~~generate an enriched event by enriching the event with the contextual data, the enriched event including the data value, the particular time, and the contextual data; and~~

~~provide the enriched event to a consuming application configured to operate based on the enriched event.~~

~~110. The building system of claim 109, wherein the instructions cause the one or more processors to identify the contextual data by searching the building graph projection that includes the contextual description of the piece of building equipment.~~

111. The building system of claim 110, wherein the plurality of nodes represent the plurality of entities and the plurality of edges represent relationships between the plurality of entities;

wherein the plurality of nodes include a node representing the piece of building equipment;

wherein the instructions cause the one or more processors to identify the contextual data by identifying one or more nodes of the plurality of nodes related to the node representing the piece of building equipment based on one or more edges of the plurality of edges between the node representing the piece of building equipment and the one or more nodes.

112. A method comprising:

retrieving, by a processing circuit, projection rules for generating a building graph projection;

retrieving, by the processing circuit, a plurality of entities representing elements of a building and a plurality of relationships between the plurality of entities representing relationships between the plurality of entities;

constructing, by the processing circuit, the building graph projection including a plurality of nodes and a plurality of edges based on the plurality of entities, the plurality of relationships, and the projection rules; and

performing, by the processing circuit, one or more operations based on the building graph projection.

113. The method of claim 112, further comprising:

generating, by the processing circuit, one node of the plurality of nodes for each of the plurality of entities;

generating, by the processing circuit, an edge of the plurality of edges for each relationship of the plurality of relationships; and

connecting, by the processing circuit, the edge from a first node of the plurality of nodes to a second node of the plurality of nodes to illustrate a particular relationship of the plurality of relationships between a first entity of the plurality of entities and a second entity of the plurality of entities.

114. The method of claim 112, wherein the projection rules indicate permissions for a subscriber, wherein the permissions identify a set of the plurality of entities and a set of the relationships;

wherein the method further includes constructing, by the processing circuit, the building graph projection based on the set of the plurality of entities and the set of the plurality of relationships.

115. The method of claim 112, wherein the projection rules indicate an ontology indicating allowed relationships between types of entities;

wherein the method further includes constructing, by the processing circuit, the building graph projection based on the types of entities and the allowed relationships between the types of entities.

116. The method of claim 112, further comprising:

retrieving, by the processing circuit, for a subscriber, the projection rules for generating the building graph projection from a plurality of graph projection rules stored in a database, wherein the plurality of graph projection rules associated with a plurality of subscribers.

117. The method of claim 116, further comprising:

retrieving, by the processing circuit, second projection rules for a second subscriber of the plurality of subscribers;

constructing, by the processing circuit, a second building graph projection including a second plurality of nodes and a second plurality of edges based on the at least some of plurality of entities, at least some of the plurality of relationships, and the second projection rules;

storing, by the processing circuit, the building graph projection and the second building graph projection in a graph projection database.

118. The method of claim 112, further comprising:

receiving, by the processing circuit, a modification to the building graph projection;

generating, by the processing circuit, a change feed event, the change feed event recording the modification to the building graph projection; and

adding, by the processing circuit, the change feed event to a change feed comprising a plurality of change feed events representing modifications to the building graph projection at a plurality of different times.

119. The method of claim 118, wherein the modification is at least one of:

adding a new node to the plurality of nodes of the building graph projection;

adding a new edge to the plurality of edges of the building graph projection;

deleting an existing node of the plurality of nodes of the building graph projection;

deleting an existing edge of the plurality of edges of the building graph projection;

modifying the existing node of the plurality of nodes of the building graph projection; or

modifying the existing edge of the plurality of edges of the building graph projection.

120. One or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

retrieve projection rules for generating a building graph projection, wherein the building graph projection is a digital twin;

retrieve a plurality of entities representing elements of a building and a plurality of relationships between the plurality of entities representing relationships between the plurality of entities;

construct the building graph projection including a plurality of nodes and a plurality of edges based on the plurality of entities, the plurality of relationships, and the projection rules; and

perform one or more operations based on the building graph projection.

121. A building system of a building comprising one or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

receive a query for information of a building graph of the building from a system, the query including an indication of an entity and an indication of an event associated with the entity;

query the building graph with the indication of the entity and the indication of the event associated with the entity for the information of the building graph, the building graph including a plurality of nodes and a plurality of edges, the plurality of nodes representing a plurality of

entities and a plurality of events including the entity and the event, the plurality of edges representing relationships between the plurality of entities and the plurality of events; and

generate a query response based on the information and provide the query response to the system.

122. The building system of claim 121, wherein the indication of the entity is an indication of an entity type of the entity;

wherein the instructions cause the one or more processors to query the building graph with the indication of the entity and the event by:

identifying a node of the plurality of nodes corresponding to the entity type of the entity, the node representing the entity; and

identifying one or more edges between the node representing the entity and a second node of the plurality of nodes representing the event;

wherein the instructions cause the one or more processors to generate the query response by causing the query response to include the entity in response to identifying the node and identifying the one or more edges between the node and the second node.

123. The building system of claim 121, wherein the system includes a user application;

wherein the instructions cause the one or more processors to:

receive the query from the user application where a user provides a request for the information to the user application and the user application generates and provides the query to the building system.

124. The building system of claim 123, wherein the instructions cause the one or more processors to provide the query response to the user application;

wherein the user application generates a display indicating the information of the query response.

125. The building system of claim 121, wherein the building graph is a digital twin, wherein one or more edges of the plurality of edges between a first node representing a particular event

and a second node representing a particular building entity indicates that the particular event is associated with the particular building entity.

126. The building system of claim 125, wherein the particular building entity is a piece of building equipment that generates the particular event.

127. The building system of claim 121, wherein the instructions cause the one or more processors to:

determine whether the system has access to the information of the building graph based on a policy indicated by the plurality of nodes and edges of the building graph; and

provide the information of the building graph to the system in response to a determination that the system has access to the information of the building graph.

128. The building system of claim 127, wherein the instructions cause the one or more processors to determine whether the system has access to the information of the building graph based on the policy by:

identifying a first node of the plurality of nodes representing the system; and

identifying an edge of the plurality of edges between the first node and a second node representing the policy to access the information of the building graph.

129. The building system of claim 121, wherein the instructions cause the one or more processors to:

receive a request from the system for a capability of the entity responsive to providing the query response to the system;

identify the capability of the entity in the building graph;

receive a command to perform an operation associated with the entity, the command performing an action associated with the capability of the entity; and

provide the command to perform the operation associated with the entity to an operating system.

130. The building system of claim 129, wherein the instructions cause the one or more processors to identify the capability of the entity by:

identifying a first node of the plurality of nodes of the building graph representing the entity; and

identifying at least one of one or more nodes or one or more edges between the first node and a second node representing the capability of the entity.

131. A method comprising:

receiving, by a processing circuit, a query for information of a building graph of a building from a system, the query including an indication of an entity and an indication of an event associated with the entity;

querying, by the processing circuit, the building graph with the indication of the entity and the indication of the event associated with the entity for the information of the building graph, the building graph including a plurality of nodes and a plurality of edges, the plurality of nodes representing a plurality of entities and a plurality of events including the entity and the event, the plurality of edges representing relationships between the plurality of entities and the plurality of events; and

generating, by the processing circuit, a query response based on the information and provide the query response to the system.

132. The method of claim 131, wherein the indication of the entity is an indication of an entity type of the entity;

wherein querying, by the processing circuit, the building graph with the indication of the entity and the event comprises:

identifying a node of the plurality of nodes corresponding to the entity type of the entity, the node representing the entity; and

identifying one or more edges between the node representing the entity and a second node of the plurality of nodes representing the event;

wherein generating, by the processing circuit, the query response comprises causing the query response to include the entity in response to identifying the node and identifying the one or more edges between the node and the second node.

~~133. The method of claim 131, further comprising:~~

~~receiving, by the processing circuit, a request from the system for a capability of the entity responsive to providing the query response to the system;~~

~~identifying, by the processing circuit, the capability of the entity in the building graph;~~

~~receiving, by the processing circuit, a command to perform an operation associated with the entity, the command performing an action associated with the capability of the entity; and~~

~~providing, by the processing circuit, the command to perform the operation associated with the entity to an operating system.~~

~~134. The method of claim 131, further comprising:~~

~~receiving, the query from a user application where a user provides a request for the information to the user application and the user application generates and provides the query to a building system.~~

~~135. The method of claim 134, further comprising providing, by the processing circuit, the query response to the user application;~~

~~wherein the user application generates a display indicating the information of the query response.~~

~~136. The method of claim 131, wherein one or more edges of the plurality of edges between a first node representing a particular event and a second node representing a particular building entity indicates that the particular event is associated with the particular building entity.~~

~~137. The method of claim 136, wherein the particular building entity is a piece of building equipment that generates the particular event.~~

~~138. The method of claim 131, further comprising:~~

~~determining, by the processing circuit, whether the system has access to the information of the building graph based on a policy indicated by the plurality of nodes and edges of the building graph; and~~

providing, by the processing circuit, the information of the building graph to the system in response to a determination that the system has access to the information of the building graph.

139. The method of claim 138, wherein determining, by the processing circuit, whether the system has access to the information of the building graph based on the policy comprises:

identifying a first node of the plurality of nodes representing the system; and

identifying an edge of the plurality of edges between the first node and a second node representing the policy to access the information of the building graph.

140. One or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

receive a query for information of a building graph of a building from a system, the query including an indication of an entity and an indication of an event associated with the entity;

query the building graph with the indication of the entity and the indication of the event associated with the entity for the information of the building graph, the building graph including a plurality of nodes and a plurality of edges, the plurality of nodes representing a plurality of entities and a plurality of events including the entity and the event, the plurality of edges representing relationships between the plurality of entities and the plurality of events, wherein the building graph is a digital twin; and

generate a query response based on the information and provide the query response to the system.

141. A building system of a building comprising one or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

manage a plurality of entitlements for a plurality of subscriptions of one or more buildings with a building entitlement model, wherein a first subscription of the plurality of subscriptions is linked to first zone via the building entitlement model and a second subscription of the plurality of subscriptions is linked to a second zone via the building entitlement model;

receive a first request to perform a first operation for the first subscription and a second request to perform a second operation for the second subscription;

determine, based on the building entitlement model, whether the first subscription has a first entitlement for the first operation and whether the second subscription has a second entitlement for the second operation; and

implement the first operation on first computing resources of the first zone based on the building entitlement model in response to a first determination that the first subscription has the first entitlement and implement the second operation on second computing resources of the second zone based on the building entitlement model in response to a second determination that the second subscription has the second entitlement.

142. The building system of claim 141, wherein the plurality of entitlements indicate whether the plurality of subscriptions have authorization to utilize a plurality of functional resources of the building system.

143. The building system of claim 141, wherein the instructions cause the one or more processors to:

receive first operational data associated with the first subscription, the first operational data indicating actions of the first subscription utilizing first computing resources;

determine a resource utilization metric of the first subscription based on the first operational data;

determine to throttle the actions of the first subscription in response to determining that the resource utilization metric exceeds a level; and

throttle the actions of the first subscription to reduce an amount of the actions of the first subscription in response to determining that the resource utilization metric exceeds the level.

144. The building system of claim 141, wherein the instructions cause the one or more processors to:

receive first operational data associated with the first subscription, the first operational data indicating first actions of the first subscription utilizing first computing resources;

receive second operational data associated with the second subscription, the second operational data indicating second actions of the second subscription utilizing the second computing resources;

determine a plurality of first resource utilization metrics of the first subscription based on the first operational data; and

~~determine a plurality of second resource utilization metrics of the second subscription based on the second operational data.~~

~~145. The building system of claim 144, wherein the instructions cause the one or more processors to:~~

~~generate a first bill in an amount proportional to first resource utilization of the first subscription based on the plurality of first resource utilization metrics; and~~

~~generate a second bill in a second amount proportional to a second resource utilization of the second subscription based on the plurality of second resource utilization metrics.~~

~~146. The building system of claim 141, wherein the first zone represents a first geographic boundary and the first computing resources are located within the first geographic boundary;~~

~~wherein the second zone represents a second geographic boundary and the second computing resources are located within the second geographic boundary.~~

~~147. The building system of claim 146, wherein the first computing resources include computational resources and storage resources;~~

~~wherein the second computing resources include second computational resources and second storage resources.~~

~~148. The building system of claim 141, wherein the building entitlement model includes a tenant, wherein the tenant represents an entity associated with a billing boundary;~~

~~wherein the tenant is linked to the plurality of subscriptions by the building entitlement model.~~

~~149. The building system of claim 148, wherein the building entitlement model includes a second tenant, wherein the second tenant represents a second entity associated with a second billing boundary;~~

~~wherein the second tenant is linked, by the building entitlement model, to a second plurality of subscriptions of the building entitlement model.~~

~~150. A method comprising:~~

managing, by a processing circuit, a plurality of entitlements for a plurality of subscriptions of one or more buildings with a building entitlement model, wherein a first subscription of the plurality of subscriptions is linked to first zone via the building entitlement model and a second subscription of the plurality of subscriptions is linked to a second zone via the building entitlement model;

receiving, by the processing circuit, a first request to perform a first operation for the first subscription and a second request to perform a second operation for the second subscription;

determining, by the processing circuit, based on the building entitlement model, whether the first subscription has a first entitlement for the first operation and whether the second subscription has a second entitlement for the second operation; and

implementing, by the processing circuit, the first operation on first computing resources of the first zone based on the building entitlement model in response to a first determination that the first subscription has the first entitlement and implement the second operation on second computing resources of the second zone based on the building entitlement model in response to a second determination that the second subscription has the second entitlement.

151. The method of claim 150, wherein the plurality of entitlements indicate whether the plurality of subscriptions have authorization to utilize a plurality of functional resources of a building system.

152. The method of claim 150, further comprising:

receiving, by the processing circuit, first operational data associated with the first subscription, the first operational data indicating actions of the first subscription utilizing first computing resources;

determining, by the processing circuit, a resource utilization metric of the first subscription based on the first operational data;

determining, by the processing circuit, to throttle the actions of the first subscription in response to determining that the resource utilization metric exceeds a level; and

throttling, by the processing circuit, the actions of the first subscription to reduce an amount of the actions of the first subscription in response to determining that the resource utilization metric exceeds the level.

153. The method of claim 150, further comprising:

receiving, by the processing circuit, first operational data associated with the first subscription, the first operational data indicating first actions of the first subscription utilizing first computing resources;

receiving, by the processing circuit, second operational data associated with the second subscription, the second operational data indicating second actions of the second subscription utilizing the second computing resources;

determining, by the processing circuit, a plurality of first resource utilization metrics of the first subscription based on the first operational data; and

determining, by the processing circuit, a plurality of second resource utilization metrics of the second subscription based on the second operational data.

154. The method of claim 153, further comprising:

generating, by the processing circuit, a first bill in an amount proportional to first resource utilization of the first subscription based on the plurality of first resource utilization metrics; and

generating, by the processing circuit, a second bill in a second amount proportional to a second resource utilization of the second subscription based on the plurality of second resource utilization metrics.

155. The method of claim 150, wherein the first zone represents a first geographic boundary and the first computing resources are located within the first geographic boundary;

wherein the second zone represents a second geographic boundary and the second computing resources are located within the second geographic boundary.

156. The method of claim 155, wherein the first computing resources include computational resources and storage resources;

wherein the second computing resources include second computational resources and second storage resources.

157. The method of claim 150, wherein the building entitlement model includes a tenant, wherein the tenant represents an entity associated with a billing boundary;

wherein the tenant is linked to the plurality of subscriptions by the building entitlement model.

158. The method of claim 157, wherein the building entitlement model includes a second tenant, wherein the second tenant represents a second entity associated with a second billing boundary;

wherein the second tenant is linked, by the building entitlement model, to a second plurality of subscriptions of the building entitlement model.

159. One or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

manage a plurality of entitlements for a plurality of subscriptions of one or more buildings with a building entitlement model, wherein a first subscription of the plurality of subscriptions is linked to first zone via the building entitlement model and a second subscription of the plurality of subscriptions is linked to a second zone via the building entitlement model;

receive a first request to perform a first operation for the first subscription and a second request to perform a second operation for the second subscription;

determine, based on the building entitlement model, whether the first subscription has a first entitlement for the first operation and whether the second subscription has a second entitlement for the second operation; and

implement the first operation on first computing resources of the first zone based on the building entitlement model in response to a first determination that the first subscription has the first entitlement and implement the second operation on second computing resources of the second zone based on the building entitlement model in response to a second determination that the second subscription has the second entitlement.

160. The one or more memory devices of claim 159, wherein the plurality of entitlements indicate whether the plurality of subscriptions have authorization to utilize a plurality of functional resources of a building system.

161. An edge platform of a building communicatively coupled to a cloud system, the edge platform comprising:

one or more memory devices having instructions stored thereon, the one or more memory devices located on-premises within the building; and

one or more processors located on-premises within the building, the one or more processors executing the instructions causing the one or more processors to:

receive an event from a piece of building equipment of the building, the event indicating a data value associated with the piece of building equipment occurring at a particular time;

identify contextual data of a data structure that provides a contextual description of the event;

generate an enriched event by enriching the event with the contextual data, the enriched event including the data value, the particular time, and the contextual data; and

communicate the enriched event to the cloud system configured to operate based on the enriched event.

162. The edge platform of claim 161, wherein the instructions cause the one or more processors to:

train one or more machine learning models stored locally by the edge platform based on the enriched event; and

perform one or more operations with the piece of building equipment based on the one or more machine learning models.

163. The edge platform of claim 161, wherein the instructions cause the one or more processors to identify the contextual data based on one or more enrichment rules;

wherein the instructions cause the one or more processors to:

identify second contextual data of the data structure based on one or more second enrichment rules;

generate a second enriched event by enriching the event with the second contextual data, the data value, and the particular time; and

provide the second enriched event to the cloud system.

164. The edge platform of claim 161, wherein the data structure is a digital twin including a graph;

wherein the instructions cause the one or more processors to identify the contextual data by searching the graph that includes the contextual description of the event.

165. The edge platform of claim 164, wherein the graph includes a plurality of nodes and a plurality of edges;

wherein the plurality of nodes represent entities of the building and the plurality of edges represent relationships between the entities of the building;

wherein the plurality of nodes include a node representing the piece of building equipment;

wherein the instructions cause the one or more processors to identify the contextual data by identifying one or more nodes of the plurality of nodes related to the node representing the piece of building equipment based on one or more edges of the plurality of edges between the node representing the piece of building equipment and the one or more nodes.

166. The edge platform of claim 161, wherein the data structure is a digital twin stored by the edge platform;

wherein the digital twin of the edge platform is updated based on a plurality of changes made to a second digital twin stored by the cloud system to synchronize the second digital twin stored by the cloud system with the digital twin of the edge platform.

167. The edge platform of claim 166, wherein the instructions cause the one or more processors to:

receive a change feed of change feed events indicating the plurality of changes to the second digital twin; and

update the digital twin stored by the edge platform with the change feed by making the plurality of changes to the digital twin stored by the edge platform.

168. The edge platform of claim 167, wherein the second digital twin is a graph including a plurality of nodes represent entities of the building and plurality of edges represent relationships between the entities of the building;

wherein the plurality of changes include at least one of:

adding a new node to the plurality of nodes of the graph;

adding a new edge to the plurality of edges of the graph;

deleting an existing node of the plurality of nodes of the graph;

deleting an existing edge of the plurality of edges of the graph;

modifying the existing node of the plurality of nodes of the graph; or

modifying the existing edge of the plurality of edges of the graph.

169. The edge platform of claim 167, wherein the instructions cause the one or more processors to:

read the change feed events from a change feed topic, wherein the edge platform is subscribed to the change feed topic and receives the change feed events in response to the change feed events being added to the change feed topic by the cloud system.

170. A method comprising:

receiving, by an edge platform, an event from a piece of building equipment of a building, the event indicating a data value associated with the piece of building equipment occurring at a particular time, the edge platform located on-premises within the building and communicatively coupled to a cloud system;

identifying, by the edge platform contextual data of a data structure that provides a contextual description of the event;

generating, by the edge platform an enriched event by enriching the event with the contextual data, the enriched event including the data value, the particular time, and the contextual data; and

communicating, by the edge platform, the enriched event to the cloud system configured to operate based on the enriched event.

171. The method of claim 170, further comprising:

training, by the edge platform one or more machine learning models stored locally by the edge platform based on the enriched event; and

performing, by the edge platform one or more operations with the piece of building equipment based on the one or more machine learning models.

172. The method of claim 170, further comprising:

identifying, by the edge platform, the contextual data based on one or more enrichment rules;

identifying, by the edge platform, second contextual data of the data structure based on one or more second enrichment rules;

generating, by the edge platform, a second enriched event by enriching the event with the second contextual data, the data value, and the particular time; and

providing, by the edge platform, the second enriched event to the cloud system.

173. The method of claim 170, wherein the data structure is a graph;

wherein the method further comprises identifying, by the edge platform, the contextual data by searching the graph that includes the contextual description of the event.

174. The method of claim 173, wherein the graph includes a plurality of nodes and a plurality of edges;

wherein the plurality of nodes represent entities of the building and the plurality of edges represent relationships between the entities of the building;

wherein the plurality of nodes include a node representing the piece of building equipment;

wherein the method further comprises identifying, by the edge platform, the contextual data by identifying one or more nodes of the plurality of nodes related to the node representing the piece of building equipment based on one or more edges of the plurality of edges between the node representing the piece of building equipment and the one or more nodes.

175. The method of claim 170, wherein the data structure is a digital twin stored by the edge platform;

wherein the method further comprises updating the digital twin of the edge platform based on a plurality of changes made to a second digital twin stored by the cloud system to synchronize the second digital twin stored by the cloud system with the digital twin of the edge platform.

176. The method of claim 175, further comprising:

receiving, by the edge platform, a change feed of change feed events indicating the plurality of changes to the second digital twin; and

updating, by the edge platform, the digital twin stored by the edge platform with the change feed by making the plurality of changes to the digital twin stored by the edge platform.

177. The method of claim 176, wherein the second digital twin is a graph including a plurality of nodes represent entities of the building and plurality of edges represent relationships between the entities of the building;

wherein the plurality of changes include at least one of:

adding a new node to the plurality of nodes of the graph;

adding a new edge to the plurality of edges of the graph;

deleting an existing node of the plurality of nodes of the graph;

deleting an existing edge of the plurality of edges of the graph;

modifying the existing node of the plurality of nodes of the graph; or

modifying the existing edge of the plurality of edges of the graph.

178. The method of claim 176, further comprising:

reading, by edge platform, the change feed events from a change feed topic, wherein the edge platform is subscribed to the change feed topic and receives the change feed events in response to the change feed events being added to the change feed topic by the cloud system.

179. An edge platform of a building communicatively coupled to a cloud system, the edge platform comprising:

one or more memory devices having instructions stored thereon; and

one or more processors, the one or more processors executing the instructions causing the one or more processors to:

receive an event from a piece of building equipment of the building, the event indicating a data value associated with the piece of building equipment occurring at a particular time;

identify contextual data of a data structure that provides a contextual description of the event, wherein the data structure is a digital twin;

generate an enriched event by enriching the event with the contextual data, the enriched event including the data value, the particular time, and the contextual data; and

communicate the enriched event to the cloud system configured to operate based on the enriched event.

180. The edge platform of claim 179, wherein the data structure is a graph;

wherein the instructions cause the one or more processors to identify the contextual data by searching the graph that includes the contextual description of the event.

181. A building system of a building comprising one or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

store a digital twin of the building comprising a graph data structure, the graph data structure comprising a plurality of nodes representing entities of the building and a plurality of edges between the plurality of nodes representing relationships between the entities of the building;

receive an modification to the digital twin of the building, the update modifying at least one of the plurality of nodes or the plurality of edges;

generate a change feed event of a change feed, the change feed event recording the modification to the graph data structure, the change feed comprising a plurality of change feed events representing modifications to the graph data structure at a plurality of different times; and

synchronize, based on the change feed event, an external digital twin of the building of an external system with the digital twin of the building by communicating with the external system.

182. The building system of claim 181, wherein the entities of the building are at least one of building equipment, locations of the building, users of the building, and events of the building.

183. The building system of claim 181, wherein the instructions cause the one or more processors to receive the modification to the digital twin of the building by:

receiving an event from a piece of building equipment of the building; and

determining, based on the event, the modification to the digital twin of the building.

184. The building system of claim 181, wherein the instructions cause the one or more processors to synchronize, based on the change feed event, the external digital twin of the building of the external system with the digital twin of the building by communicating the change feed event to the external system, wherein the external system updates the external digital twin of the building based on the change feed event.

185. The building system of claim 181, wherein the instructions cause the one or more processors to:

receive the modification to the digital twin of the building from a second external system, wherein the modification to the digital twin of the building is based on a second modification made by the second external system to a second external digital twin of the building stored by the second external system.

186. The building system of claim 181, wherein the modification is at least one of:

adding a new node to the plurality of nodes of the graph data structure;

adding a new edge to the plurality of edges of the graph data structure;

deleting an existing node of the plurality of nodes of the graph data structure;

deleting an existing edge of the plurality of edges of the graph data structure;

modifying the existing node of the plurality of nodes of the graph data structure; or

modifying the existing edge of the plurality of edges of the graph data structure.

187. The building system of claim 181, wherein the instructions cause the one or more processors to:

add the change feed event to a change feed topic, wherein the external system is subscribed to the change feed topic and receives the change feed event in response to the change feed event being added to the change feed topic.

188. The building system of claim 181, wherein the instructions cause the one or more processors to synchronize, based on the change feed event, the external digital twin of the building of the external system with the digital twin of the building by communicating with the

external system, wherein the external digital twin of the building is in a first format different than a format of the digital twin of the building.

189. The building system of claim 188, where the instructions cause the one or more processors to:

synchronize, based on the change feed event, a second external digital twin of a second external system, the second external digital twin in a second format different than the first format of the external digital twin and the format of the digital twin of the building.

190. The building system of claim 189, wherein the instructions cause the one or more processors to:

generate a first update for the external digital twin of the building in the first format for the external digital twin of the building of the external system based on the change feed event;

generate a second update for the second external digital twin of the building in the second format for the second external digital twin of the building of the second external system based on the change feed event;

communicate the first update for the external digital twin of the building to the external system, wherein the external system updates the external digital twin of the building based on the first update; and

communicate the second update for the second external digital twin of the building to the second external system, wherein the second external system updates the external digital twin of the building based on the second update.

191. A method comprising:

storing, by a processing circuit, a digital twin of the building comprising a graph data structure, the graph data structure comprising a plurality of nodes representing entities of the building and a plurality of edges between the plurality of nodes representing relationships between the entities of the building;

receiving, by the processing circuit, an modification to the digital twin of the building, the update modifying at least one of the plurality of nodes or the plurality of edges;

generating, by the processing circuit, a change feed event of a change feed, the change feed event recording the modification to the graph data structure, the change feed comprising a plurality of change feed events representing modifications to the graph data structure at a plurality of different times; and

synchronizing, by the processing circuit, based on the change feed event, an external digital twin of the building of an external system with the digital twin of the building by communicating with the external system.

192. The method of claim 190, wherein the entities of the building are at least one of building equipment, locations of the building, users of the building, and events of the building.

193. The method of claim 190, wherein receiving, by the processing circuit, the modification to the digital twin of the building comprises:

receiving an event from a piece of building equipment of the building; and

determining, based on the event, the modification to the digital twin of the building.

194. The method of claim 190, wherein synchronizing, by the processing circuit, based on the change feed event, the external digital twin of the building of the external system with the digital twin of the building comprises communicating the change feed event to the external system, wherein the external system updates the external digital twin of the building based on the change feed event.

195. The method of claim 190, further comprising:

receiving, by the processing circuit, the modification to the digital twin of the building from a second external system, wherein the modification to the digital twin of the building is based on a second modification made by the second external system to a second external digital twin of the building stored by the second external system.

196. The method of claim 190, wherein the modification is at least one of:

adding a new node to the plurality of nodes of the graph data structure;

adding a new edge to the plurality of edges of the graph data structure;

deleting an existing node of the plurality of nodes of the graph data structure;

deleting an existing edge of the plurality of edges of the graph data structure;

modifying the existing node of the plurality of nodes of the graph data structure; or

modifying the existing edge of the plurality of edges of the graph data structure.

197. The method of claim 190, further comprising:

adding, by the processing circuit, the change feed event to a change feed topic, wherein the external system is subscribed to the change feed topic and receives the change feed event in response to the change feed event being added to the change feed topic.

198. The method of claim 190, wherein synchronizing, by the processing circuit, based on the change feed event, the external digital twin of the building of the external system with the digital twin of the building comprises communicating with the external system, wherein the external digital twin of the building is in a first format different than a format of the digital twin of the building.

199. The method of claim 198, further comprising:

synchronizing, by the processing circuit, based on the change feed event, a second external digital twin of a second external system, the second external digital twin in a second format different than the first format of the external digital twin and the format of the digital twin of the building.

200. One or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

store a digital twin of a building comprising a graph data structure, the graph data structure comprising a plurality of nodes representing entities of the building and a plurality of edges between the plurality of nodes representing relationships between the entities of the building;

receive an modification to the digital twin of the building, the update modifying at least one of the plurality of nodes or the plurality of edges;

~~generate a change feed event of a change feed, the change feed event recording the modification to the graph data structure, the change feed comprising a plurality of change feed events representing modifications to the graph data structure at a plurality of different times; and~~

~~synchronize, based on the change feed event, an external digital twin of the building of an external system with the digital twin of the building by communicating with the external system.~~

1. A building system comprising one or more memory devices having instructions thereon, that, when executed by one or more processors, cause the one or more processors to:

receive an event from an event source associated with a building, the event indicating a data value associated with the event source associated with the building;

identify a contextual description of the event source associated with the building in a digital twin of the building, the digital twin of the building comprising contextual building data identifying the event source associated with the building and one or more relationships relating one or more entities of the building to the event source associated with the building, wherein the one or more entities of the building provide the contextual description of the event source associated with the building;

generate an enriched event by enriching the event with the contextual description of the event source associated with the building, the enriched event including the data value and the contextual description of the event source associated with the building; and

provide the enriched event to a consuming system configured to operate based on the enriched event.

2. The building system of claim 1, wherein the instructions cause the one or more processors to:

retrieve one or more schemas from a schema database, the one or more schemas indicating available schema formats for events;

determine whether a schema that the event is formatted in matches the one or more schemas;

generate the enriched event in response to determining that the schema that the event is formatted in matches the one or more schemas; and

perform at least one of:

adding the event into a dead letter storage in response to a determination that the schema that the event is formatted in does not match the one or more schemas; or

adding the schema that the event is formatted in into the schema database in response to determining that the schema that the event is formatted in does not match the one or more schemas and in response to determining that the building system is operating in a discovery mode to discover new schemas.

3. The building system of claim 1, wherein the instructions cause the one or more processors to cause the enriched event to be added to a topic subscribed to by the consuming system.

4. The building system of claim 1, wherein the instructions cause the one or more processors to persist the enriched event in an event database.

5. The building system of claim 1, wherein the instructions cause the one or more processors to identify the contextual description based on one or more enrichment rules associated with the consuming system.

6. The building system of claim 5, wherein the instructions cause the one or more processors cause the one or more processors to:

identify second contextual data of the digital twin based on one or more second enrichment rules associated with a second consuming system;

generate a second enriched event by enriching the event with the second contextual data and the data value; and

provide the second enriched event to the second consuming system.

7. The building system of claim 1, wherein the event is received from a piece of building equipment of the building;

wherein the digital twin of the building is a building graph;

wherein the instructions cause the one or more processors to identify the contextual description by searching the building graph that includes the contextual description of the piece of building equipment.

8. The building system of claim 7, wherein the building graph includes a plurality of nodes and a plurality of edges;

wherein the plurality of nodes represent entities of the building and the plurality of edges represent relationships between the entities of the building.

9. The building system of claim 7, wherein the contextual description includes one or more capabilities of the piece of building equipment.

10. The building system of claim 7, wherein the contextual description includes at least one of:

a location where the piece of building equipment is located;

another piece of building equipment related to the piece of building equipment;

a point of the piece of building equipment; and

a person associated with the piece of building equipment.

11. The building system of claim 10, wherein the location is at least one of the building that the piece of building equipment is located in or a space that the piece of building equipment is located in.

12. A method comprising:

receiving, by a processing circuit, an event from an event source associated with a building, the event indicating a data value associated with the event source associated with the building;

identifying, by the processing circuit, a contextual description of the event source associated with the building in a digital twin of the building, the digital twin of the building comprising contextual building data identifying the event source associated with the building and one or more relationships relating one or more entities of the building to the event source associated with the building, wherein the one or more entities of the building provide the contextual description of the event source associated with the building;

generating, by the processing circuit, an enriched event by enriching the event with the contextual description of the event source associated with the building, the enriched event including the data value and the contextual description of the event source associated with the

building; and

providing, by the processing circuit, the enriched event to a consuming system configured to operate based on the enriched event.

13. The method of claim 12, further comprising causing, by the processing circuit, the enriched event to be added to a topic subscribed to by the consuming system.

14. The method of claim 12, further comprising persisting, by the processing circuit, the enriched event in an event database.

15. The method of claim 12, wherein identifying, by the processing circuit, the contextual description based on one or more enrichment rules associated with the consuming system.

16. The method of claim 12, wherein the event is received from a piece of building equipment of the building;

wherein the digital twin of the building is a building graph;

wherein the method further comprises identifying, by the processing circuit, the contextual description by searching the building graph that includes the contextual description of the piece of building equipment.

17. The method of claim 16, wherein the building graph includes a plurality of nodes and a plurality of edges;

wherein the plurality of nodes represent entities of the building and the plurality of edges represent relationships between the entities of the building.

18. The method of claim 16, wherein the contextual description includes one or more capabilities of the piece of building equipment.

19. The method of claim 16, wherein the contextual description includes at least one of:

a location where the piece of building equipment is located;

another piece of building equipment related to the piece of building equipment;

a point of the piece of building equipment; and

a person associated with the piece of building equipment.

20. A building system comprising:

one or more memory devices having instructions thereon; and

one or more processors configured to execute the instructions causing the one or more processors to:

receive an event from an event source associated with a building, the event indicating a data value associated with the event source associated with the building;

identify a contextual description of the event source associated with the building in a digital twin of the building, the digital twin of the building comprising contextual building data identifying the event source associated with the building and one or more relationships relating one or more entities of the building to the event source associated with the building, wherein the one or more entities of the building provide the contextual description of the event source associated with the building;

generate an enriched event by enriching the event with the contextual description of the event source associated with the building, the enriched event including the data value and the contextual description of the event source associated with the building; and

provide the enriched event to a consuming system configured to operate based on the enriched event.