CLAIMS

1. A method for configuring role-based digital twins, comprising:

receiving, by a processing system having one or more processors, an organizational definition of an industrial plant operation, wherein the organizational definition defines a set of roles within the industrial plant operation;

generating, by the processing system, an organizational digital twin of the industrial plant operation based on the organizational definition, wherein the organizational digital twin is a digital representation of an organizational structure of the industrial plant operation;

determining, by the processing system, a set of relationships between different roles within the set of roles based on the organizational definition;

determining, by the processing system, a set of settings for a role from the set of roles based on the determined set of relationships, wherein the set of settings for the set of roles includes role-based permission settings;

linking an identity of a respective individual to the role;

determining, by the processing system, a configuration of a presentation layer of a role-based digital twin corresponding to the role based on the settings of the role that is linked to the identity, wherein the configuration of the presentation layer defines a set of states that is depicted in the role-based digital twin associated with the role;

determining, by the processing system, a set of data sources that provide data corresponding to the set of states, wherein each data source provides one or more respective types of data; and

configuring one or more data structures that is received from the one or more data sources, wherein the one or more data structures is configured to provide data used to populate one or more of the set of states in the role-based digital twin.

2. The method of claim 1, wherein the organizational definition further identifies a set of physical assets of the industrial plant operation.

3. The method of claim 1, wherein determining the set of relationships includes parsing the organizational definition to identify a reporting structure and one or more business units of the industrial plant operation.

4. The method of claim 3, wherein the set of relationships is inferred from the reporting structure and the business units.

5. The method of claim 1, further comprising linking a set of identities to the set of roles, wherein each identity corresponds to a respective role from the set of roles.

6. The method of claim 1, wherein the role-based digital twin integrates with an industrial plant operation resource planning system that operates on the organizational digital twin that represents the set of roles in the industrial plant operation, such that changes in the industrial plant operation resource planning system are automatically reflected in the organizational digital twin.

7. The method of claim 1, wherein the organizational structure includes hierarchical components.

8. The method of claim 1, wherein the role-based permission settings are based on hierarchical components defined in the organizational definition.

9. The method of claim 1, wherein the set of settings for the set of roles includes role-based preference settings.

10. The method of claim 1, wherein the set of settings for the set of roles includes role-based taxonomy settings.

11. The method of claim 10, wherein the taxonomy settings identify a taxonomy that is used to characterize data that is presented in the role-based digital twin, such that the data is presented in a taxonomy that is linked to the role corresponding to the role-based digital twin.