CLAIMS:

1. A method for managing data by an agent located within a mining operation, the data being stored as voxel data on a voxel net server, the method comprising:

processing user input from a user controlling the agent within the mining operation;

receiving from the agent a request for voxel data associated with one or more voxels, the one or more voxels being a subset of voxels stored on the voxel net server, wherein each of the one or more voxels is identified based on connections with voxels of previous requests;

querying a database representing the voxel net for the one or more voxels to retrieve associated voxel data based on the connections with the voxels of the previous requests;

returning the voxel data to the agent; and

displaying the voxel data on a user device to the user.

2. The method of claim 1, wherein

the agent is mobile;

the request comprises location data indicative of a current location of the agent; and

querying the database is based on the location data.

3. The method of claim 2, wherein

the agent has a viewing direction;

the request comprises direction data indicative of the viewing direction of the agent; and

querying the database is based on the direction data.

4. The method of claim 3, further comprising raytracing based on the viewing direction to determine the one or more voxel to be queried from the database.

5. The method of any one of the preceding claims, wherein the agent is a real world vehicle.

6. The method of any one of claims 1 to 4, wherein the agent is a virtual reality agent.

7. The method of claim 6, wherein the agent is controlled by a user navigating the virtual reality.

8. The method of any one of the preceding claims, wherein the database is distributed.

9. The method of claim 8, wherein the database comprises a distributed hash table.

10. The method of claim 8 or 9, wherein

the agent comprises sensors to capture properties of material in the mine;

the method comprises receiving measurement data indicative of capture properties of the mine and identification data identifying one or more voxels of the voxel net, and storing the measurement data as voxel data.

11. The method of claim 10, wherein the agent hosts a section of the database that stores the measurement data captured by the agent.

12. The method of claim 11, wherein a local database server stores the measurement data captured by the agent.

13. The method of claim 12, wherein the local database server performs operations on the measurement data captured by the agent.

14. The method of any one of the preceding claims, further comprising performing analytics on the voxel data across multiple mines.

15. A system for voxel data storage in a mining operation, the system comprising:

an agent located within the mining operation;

a voxel net server to store the voxel data and configured to:

process user input from a user controlling the agent within the mining operation;

receive from the agent a request for voxel data associated with one or more voxels, the one or more voxels being a subset of voxels stored on the voxel net server, wherein each of the one or more voxels is identified based on connections with voxes of previous requests;

query a database, representing the voxel net for the one or more voxels to retrieve associated voxel data based on the connection with the voxels of the previous requests; and

return the voxel data to the agent, wherein

the system further comprises a user device to display the voxel data to the user.

16. The method of any one of claims 1-14, the method further comprising:

receiving from an agent located within a mining operation, data to be integrated with a voxel infrastructure;

integrating the data with the voxel infrastructure to generate an interconnected voxel infrastructure database stored on a server;

partitioning the voxel infrastructure database

requesting modelling data associated with one or more of the partitions, the one or more partitions being a subset of the integrated data;

querying the interconnected voxel infrastructure database for one or more output data so as to retrieve associated data based on the interconnections; and

returning the output modelling data to a user.