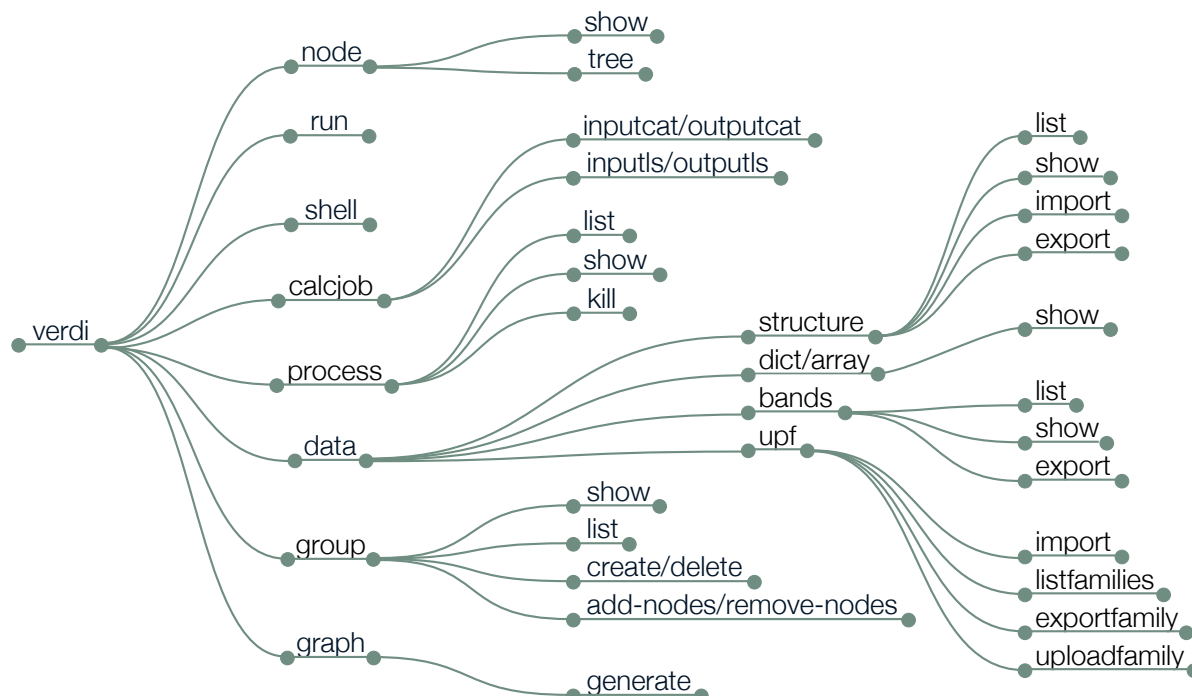


## The verdi command-line tool

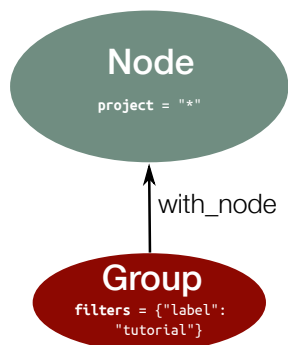
This list shows only the most common commands. Use TAB auto-completion at any level for full list



## The QueryBuilder

To import: `from aiida.orm import QueryBuilder`

Fetch all nodes of group "tutorial"



```
qb = QueryBuilder()
qb.append(Node,
           tag="nodes",
           project="*")

qb.append(Group,
           with_node="nodes",
           filters={"label": "tutorial"})

qb.all()
```

Print the smearing energy calculated for BaO<sub>3</sub>Ti if it is smaller than 10<sup>-4</sup> eV

```
qb = QueryBuilder()
qb.append(
    StructureData,
    project=["extras.formula"],
    filters={"extras.formula": "BaO3Ti"},
    tag="structure")

qb.append(
    CalcJobNode,
    tag="calculation",
    with_incoming="structure")

qb.append(
    Dict,
    tag="results",
    filters={"attributes.energy_smearing":
            {"<=": -0.0001}},
    project=[
        "attributes.energy_smearing",
        "attributes.energy_smearing_units"
    ],
    with_incoming="calculation")

qb.all()
```

