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S3IT

# Automated Construction of Task Dependency Graphs

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## Automatic arrangement of tasks

Want to avoid arranging tasks in parallel- and sequential- task collections? Use a `DependentTaskCollection`!

```
from gc3libs.workflow \
    import DependentTaskCollection

class MyWorkflow (DependentTaskCollection):
    # ...
    def __init__(self, ...):
        DependentTaskCollection.__init__(self)
        app1 = AnApp(...)
        app2 = AnotherApp(...)
        app3 = AThirdApp(...)
        self.add(app1)
        self.add(app2)
        self.add(app3, after=[app1, app2])
```

## Usage of DependentTaskCollection

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from gc3libs.workflow \
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```

Initialize the base class.

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```

... then initialize tasks that you want to run ...

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```

... then add tasks to the collection, one by one...

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```

... specifying dependencies among them.