Introduction to service and client ROS

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What is a Service?

- It is a request/reply communication paradigm.
- It is composed of two pair of messages, one for the request and one for the reply.
- Two nodes participate in the communication process.
- One node offers the service and other node request the service and wait for the response.
- A service is defined using **srv** files

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Service type

- The service type is the package resource name of the .srv file, i.e. package name + name of the .srv file.
- E.g. mysrvs/srv/PolledImage.srv has the service type mysrvs/PolledImage

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Service Tools

- rossrv - Displays information about .srv data structures.
    - rossrv show - Show service description
    - rossrv info - Alias for rossrv show
    - rossrv list - List all services
    - rossrv md5 - Display service md5sum
    - rossrv package - List services in a package
    - rossrv packages - List packages that contain services
- rosservice - Lists and queries ROS services
    - rosservice list - print information about active services
    - rosservice call - call the service with the provided args
    - rosservice type - print service type
    - rosservice find - find services by service type

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