



# OMF Update Introduction to FRCP

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Australian Government  
Department of Broadband, Communications  
and the Digital Economy  
Australian Research Council

## NICTA Funding and Supporting Members and Partners



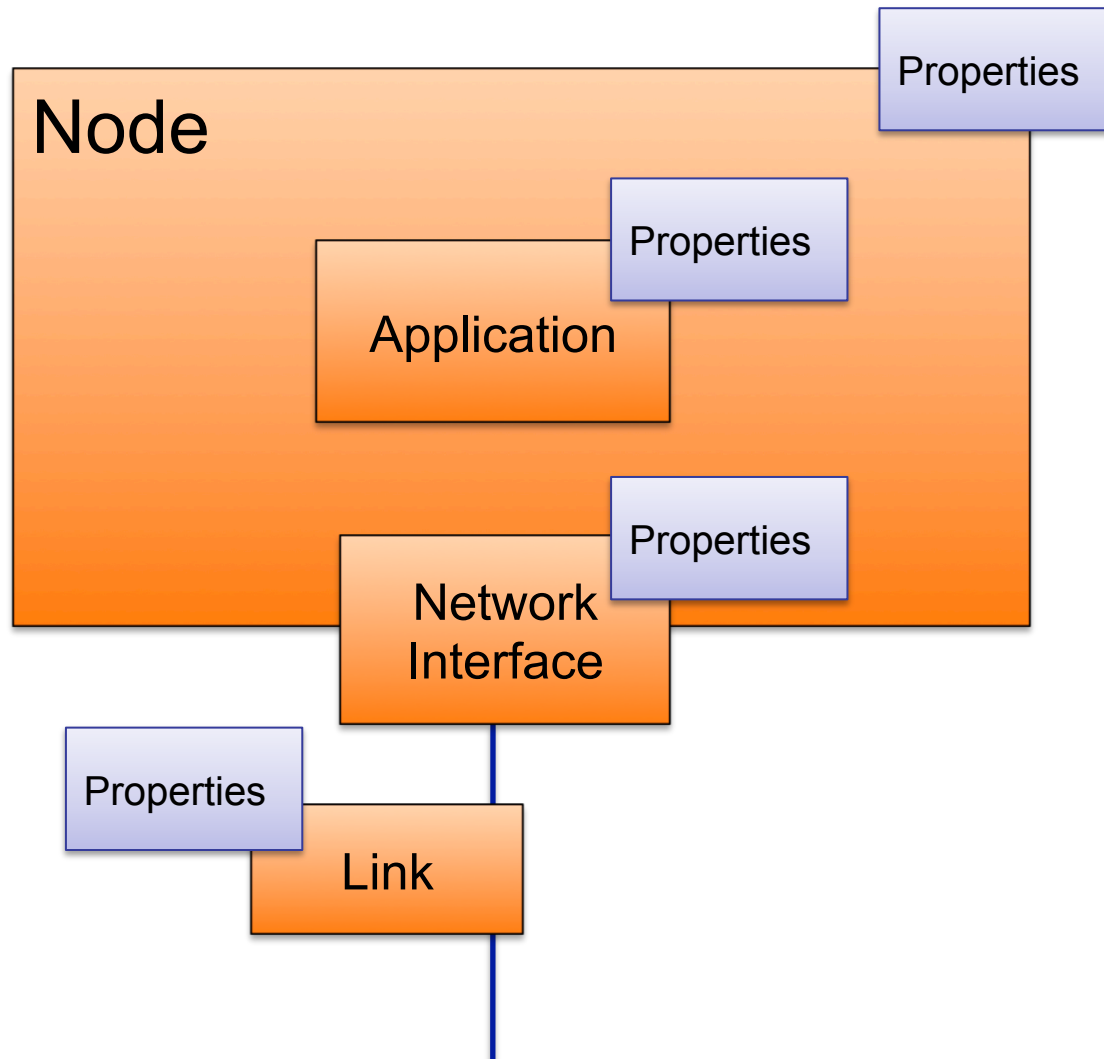
# What do we need to describe experiments?

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- A Resource Description Model
  - What do we need for the experiment
  - What are their properties and constraints
  - What do we want to measure (and how it ties back to resources)
- A Programming Model
  - How do we define the orchestration of the experiment
  - How do we deal with errors
  - How do we join long-running experiments

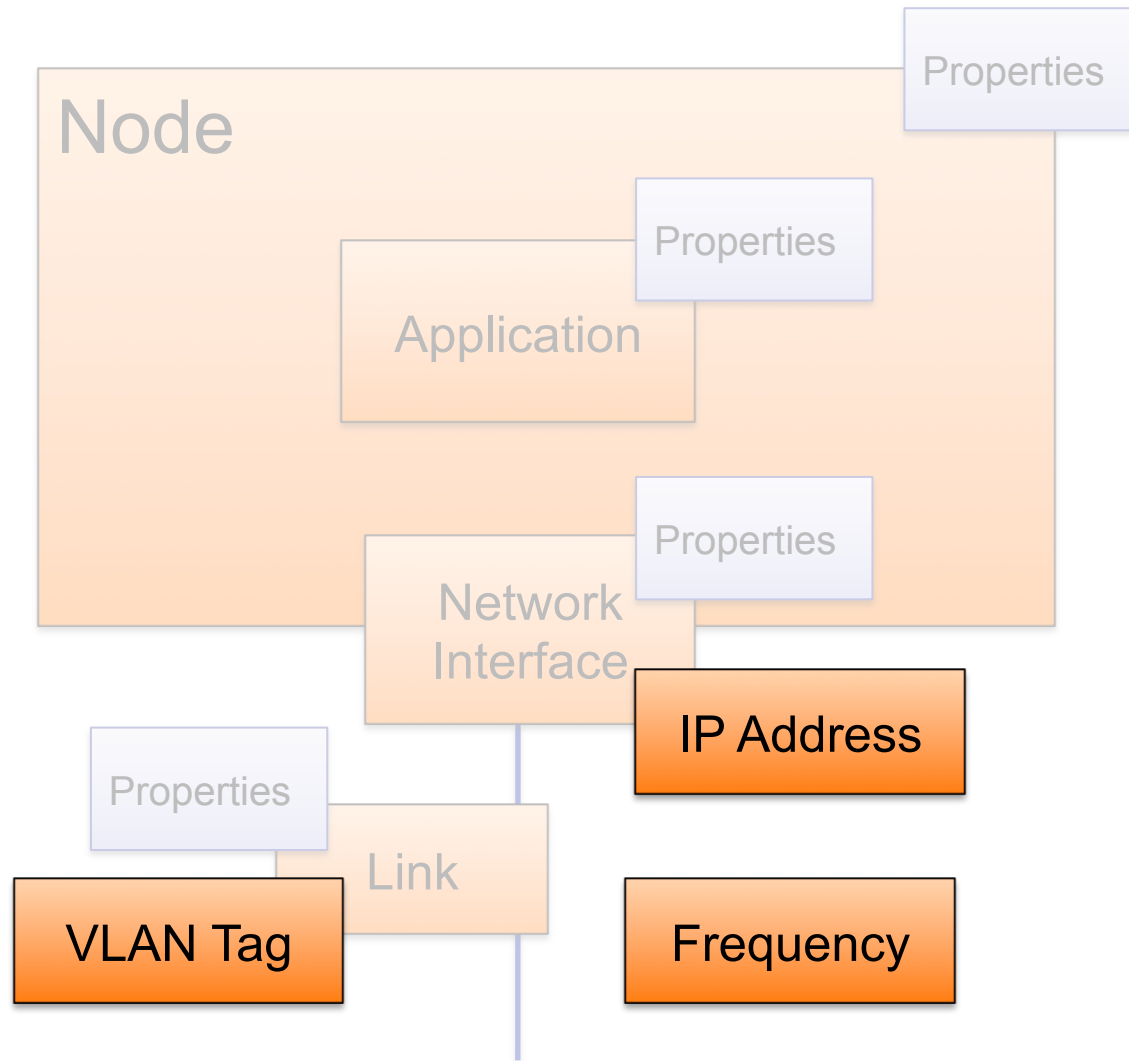
# Everything is a resource!

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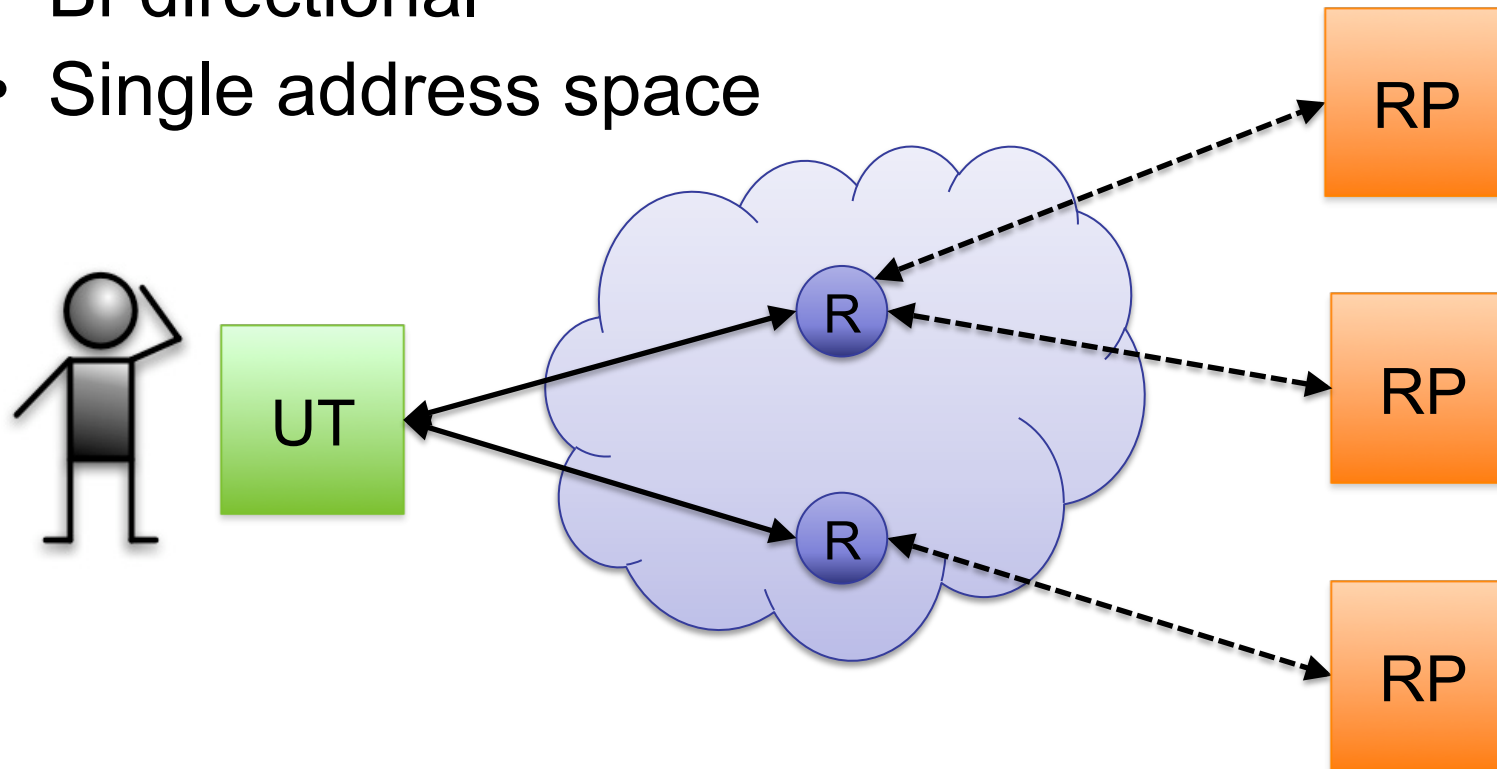
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# Interaction through Messages

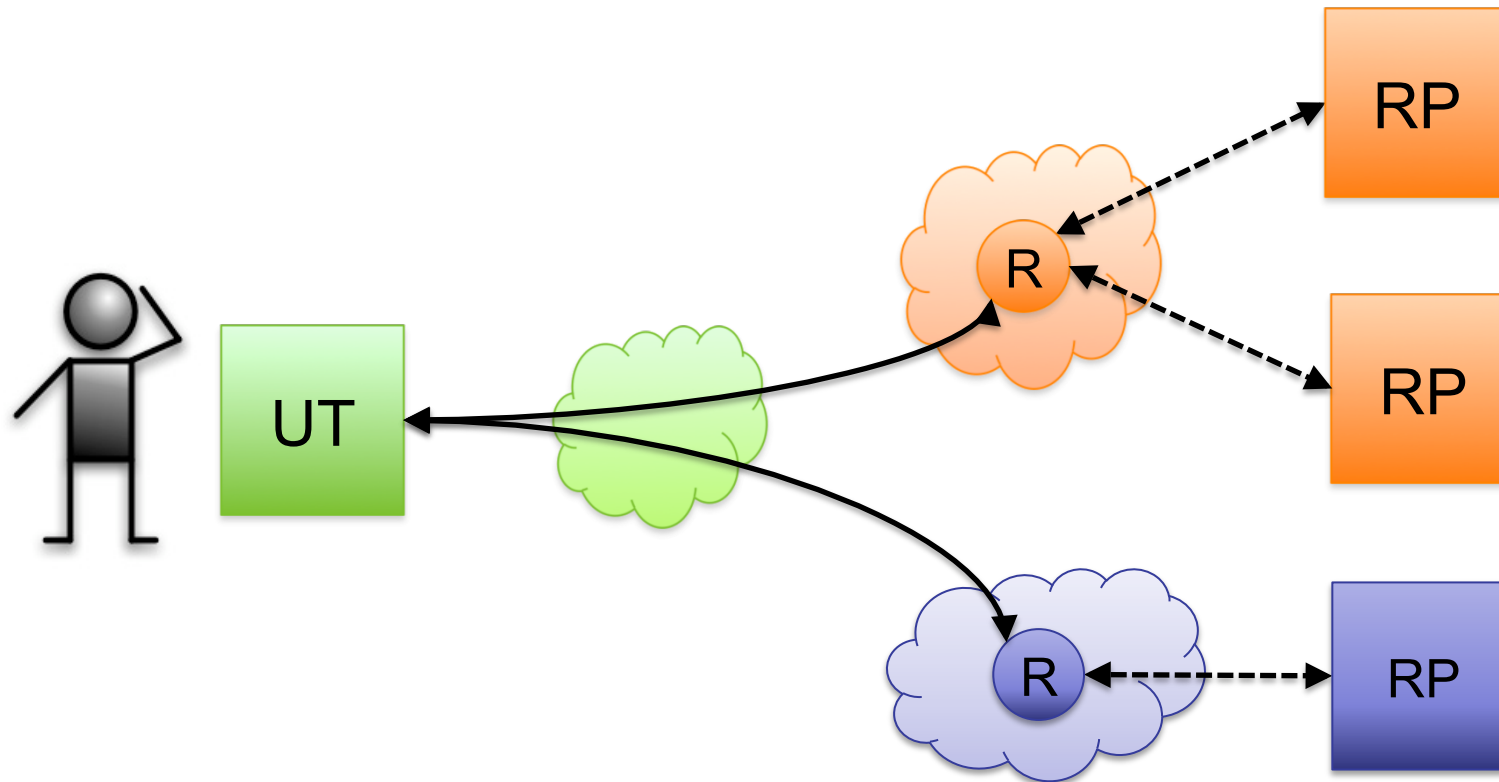
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- Loosely coupled
- Asynchronous
- Bi-directional
- Single address space



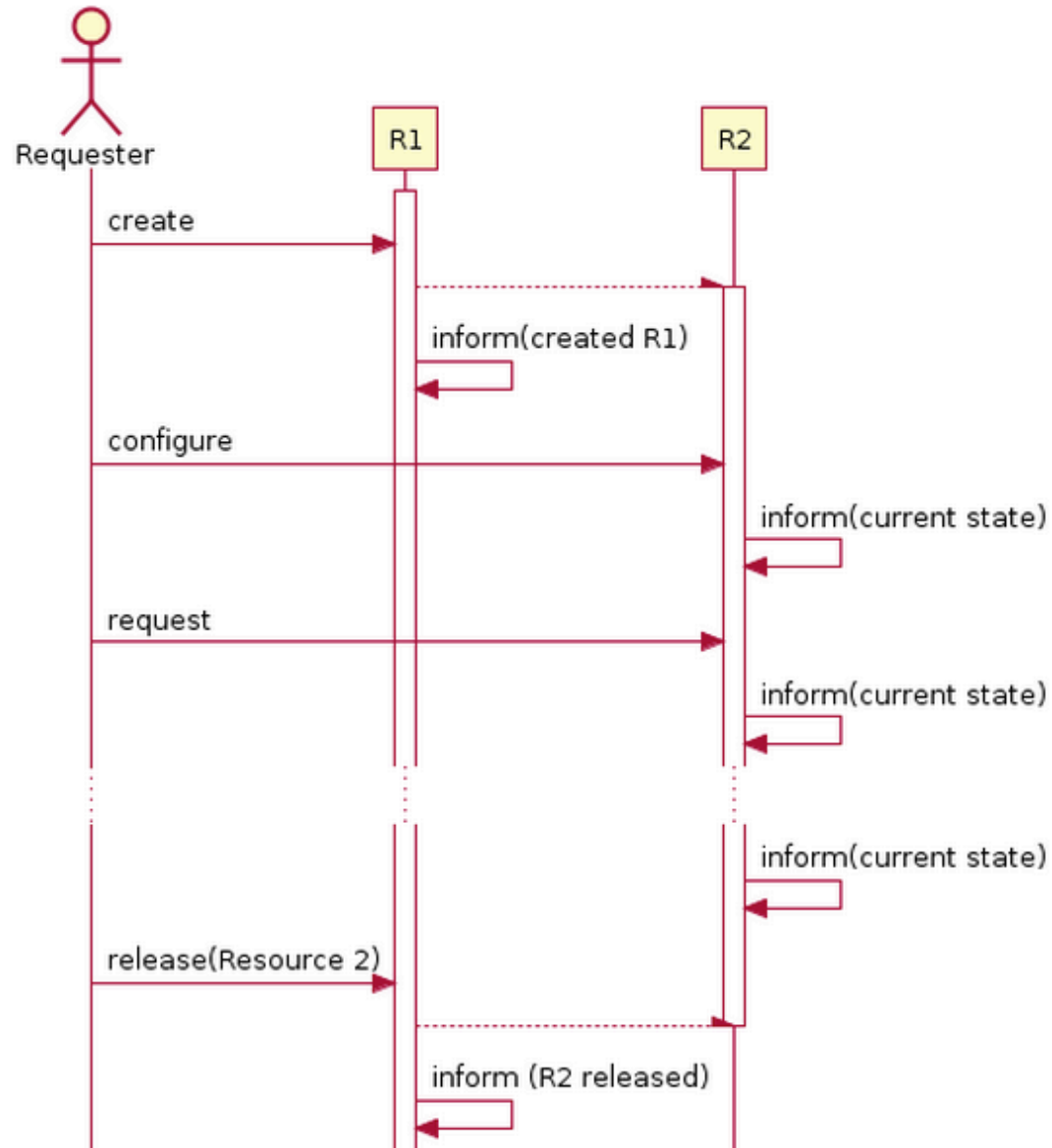
# FRCP – Federated Resource Control Protocol

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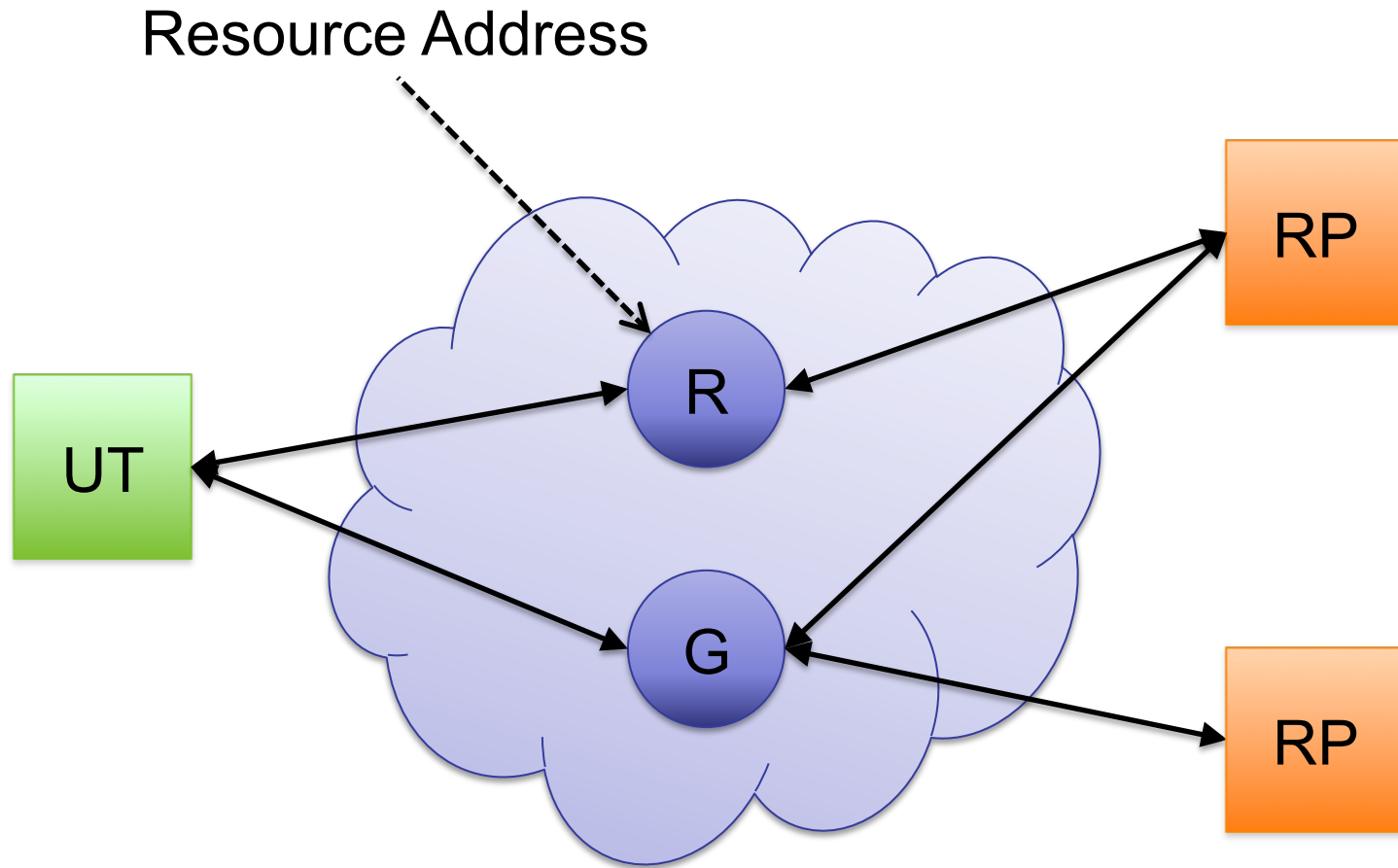
# FRCP: Message “API”

- Create
  - Create
- Configure
  - Post
- Request
  - Get
- Release
  - Delete
- Inform



# FRCP: Pub-sub Messaging

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# Status

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- FRCP defined
  - <http://bit.ly/YE7wfU>
- Two 'profiles' variants defined
  - XML over XMPP
  - JSON over AMQP
- Authentication & Authorisation
  - XML-SIG & JWT
  - Assertions as INFORM messages (needs more work)
- Shipping!
  - `% gem install omf_common`



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