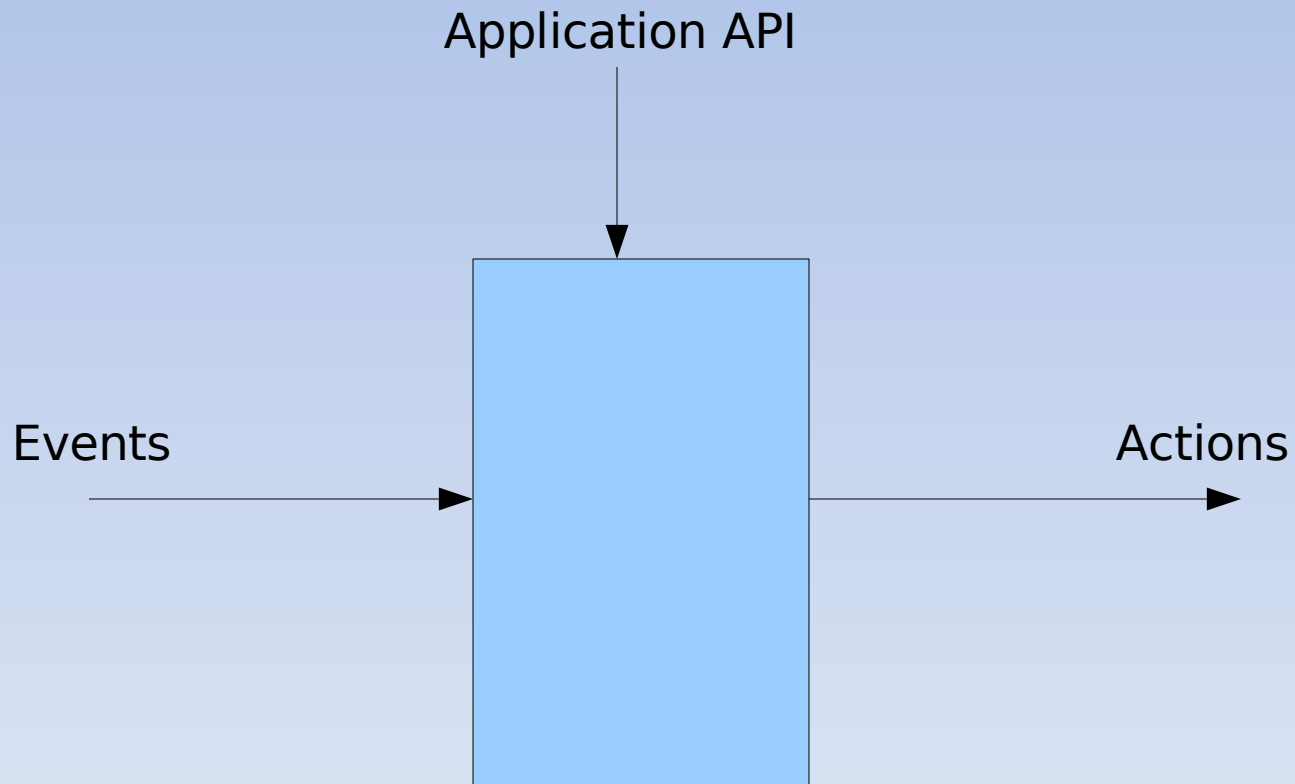# Application Proposal

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Pradeep Harish Varma

Google Proposal

- Build an Event/Action Handler

Application API

Events

Actions

Why build an Event/Action Handler?

- Users need a better way to automate how their system handles events that take place and what actions should result from such events.

- User should be able to customize it

- Applications should be able to customize it (with user confirmation)

- Automating how our phone interact with ourselves and our applications provides a more instictively productive and enjoyable experience

What is an Event/Action Handler

- Applications fire events
- Handler catches events
- Handler looks up it's ruleset and then
- Handler fires off actions for other applications

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What is an Event

- Applications fire events
- An event can be any action on the phone that provides some type of message that the Handler can catch using a broadcast receiver.
- Example:
  - If a user adds a contact on their social networking application, that application could then fire off an event notification letting the Handler know that this event occurred

What is an Action

- Handler fires off actions for other applications
- An action can be any type of intent that the phone allows
- Example:
  - If the Handler has been informed by an application that a contact has been added to that application, the Handler could in turn fire off intents to other applications to add that contact to their respective data stores as well
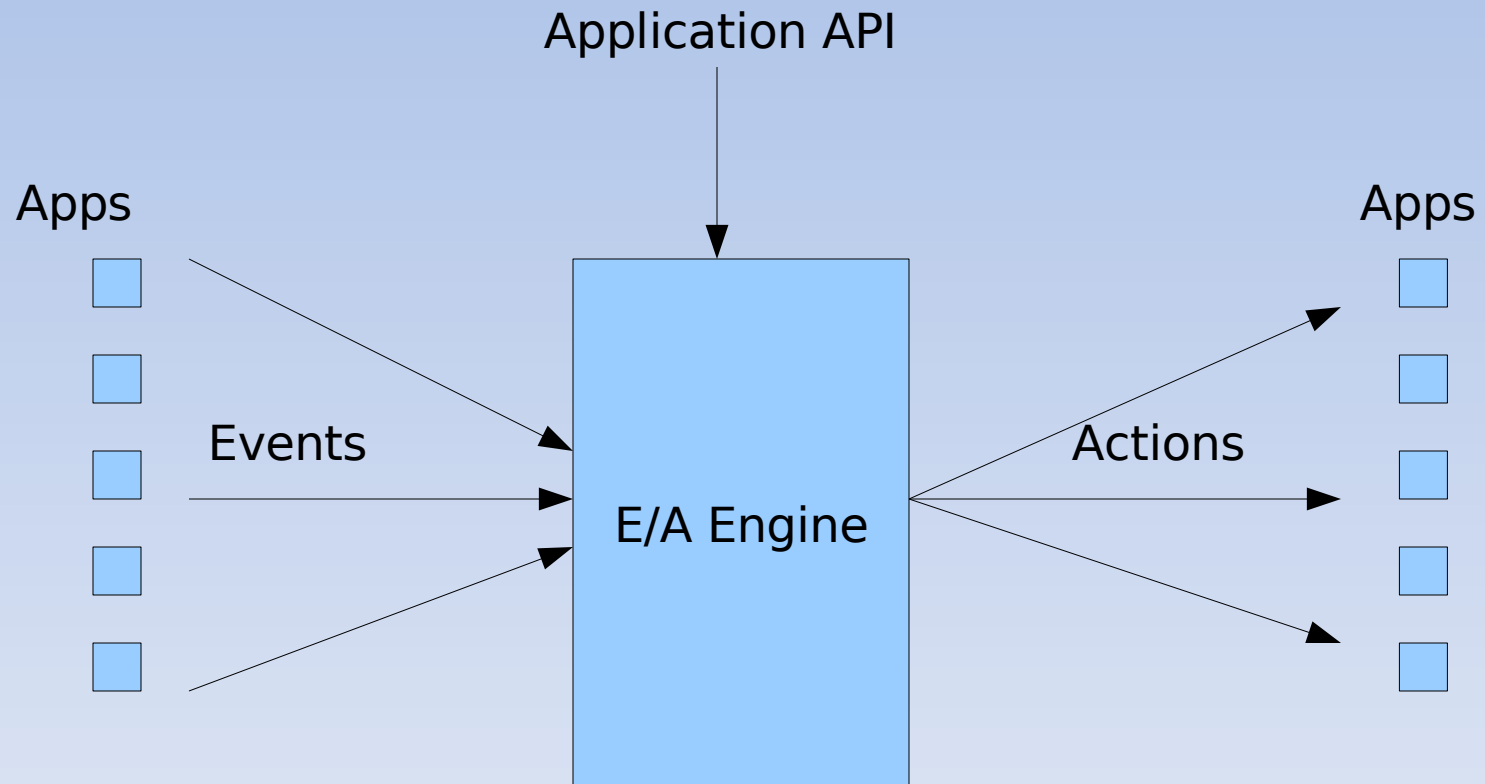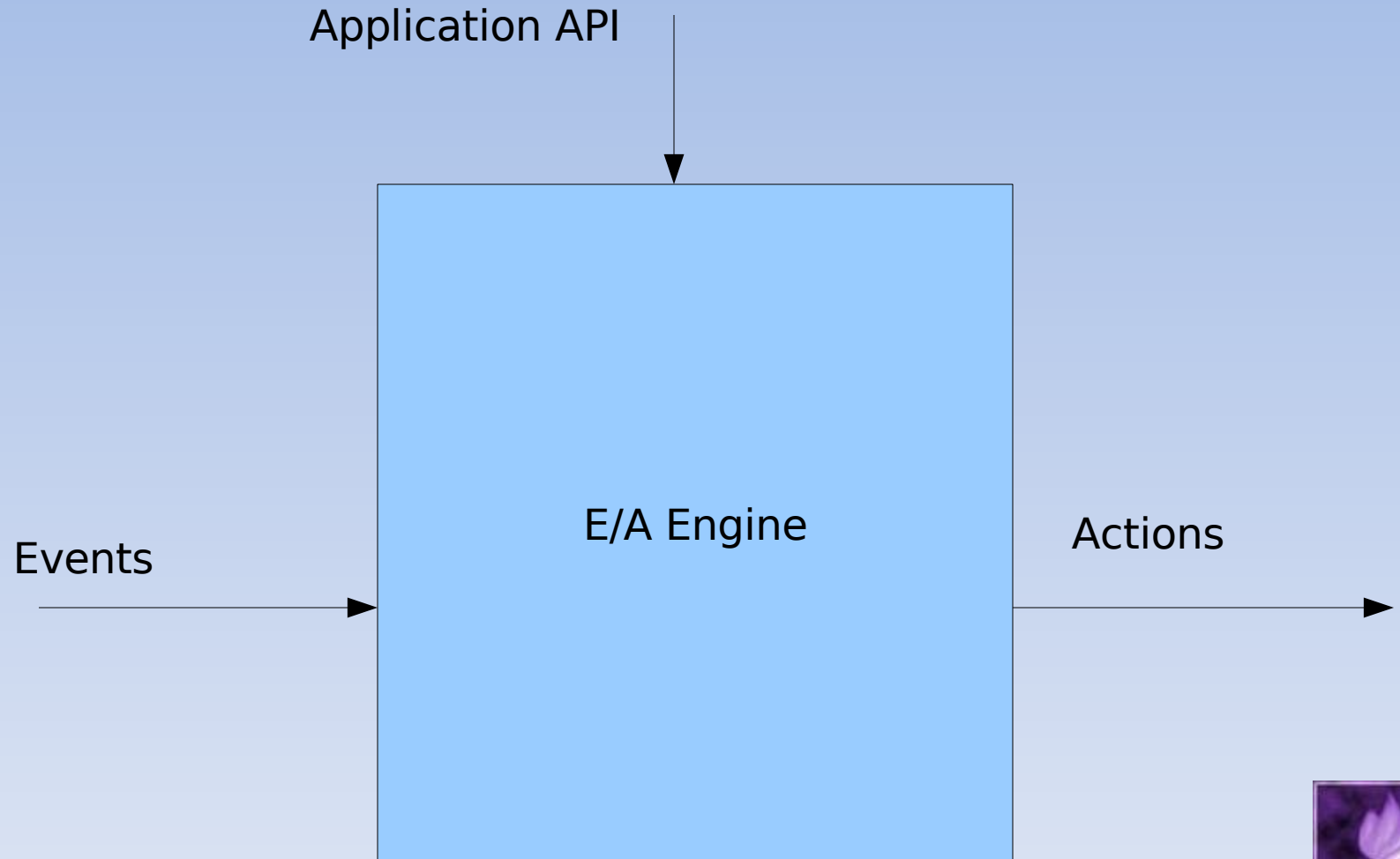
What is the Ruleset

- The ruleset is a database of events and actions
- The Handler looks up its ruleset and fires off actions based on the event that took place and what actions are predefined for that event
- Ruleset is modifiable through both the UI and through the Application API
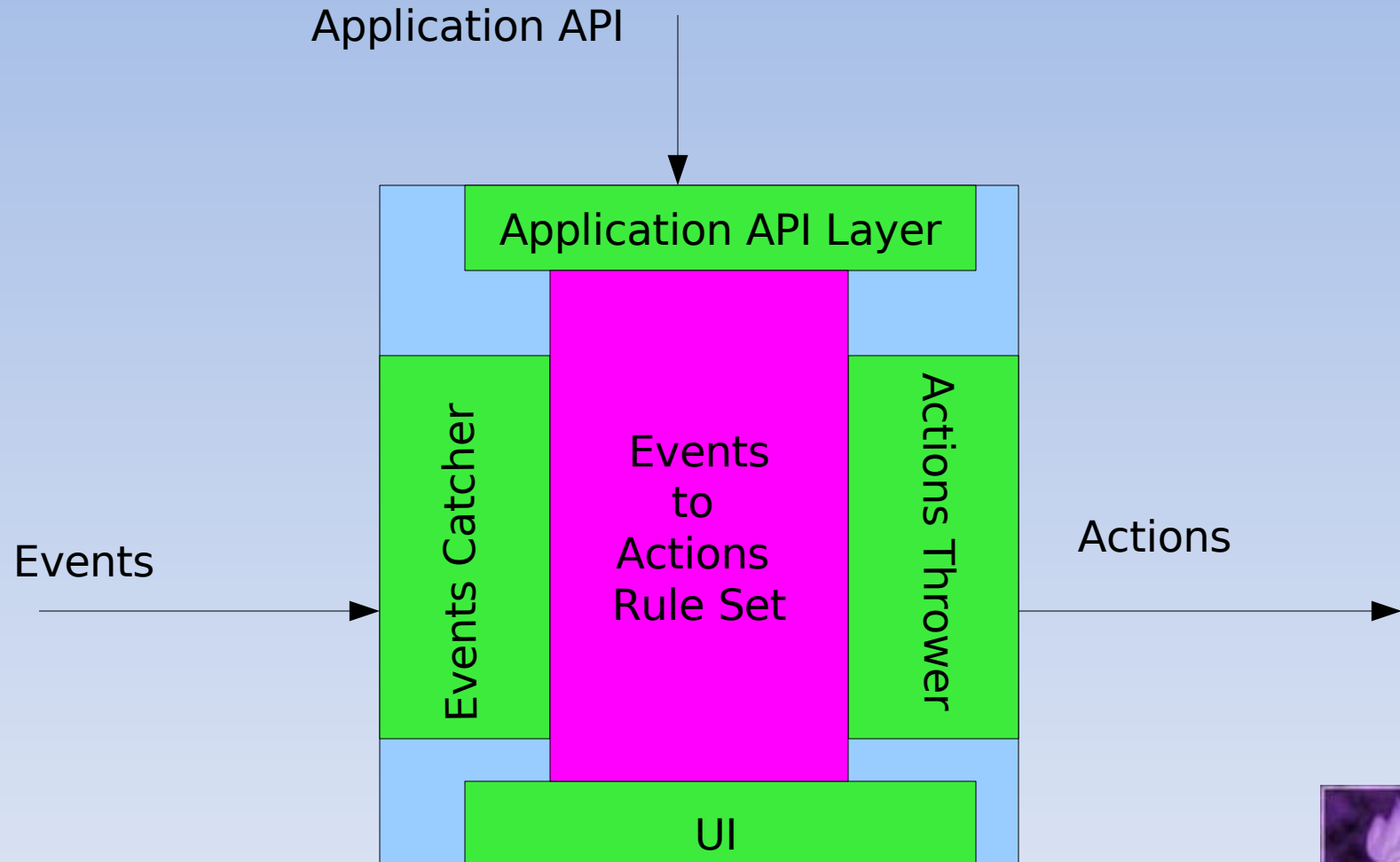- Each event can connect to multiple subsequent actions

E/A Engine

Application API

Apps

Apps

Events

Actions

E/A Engine

E/A Engine Architecture

Application API

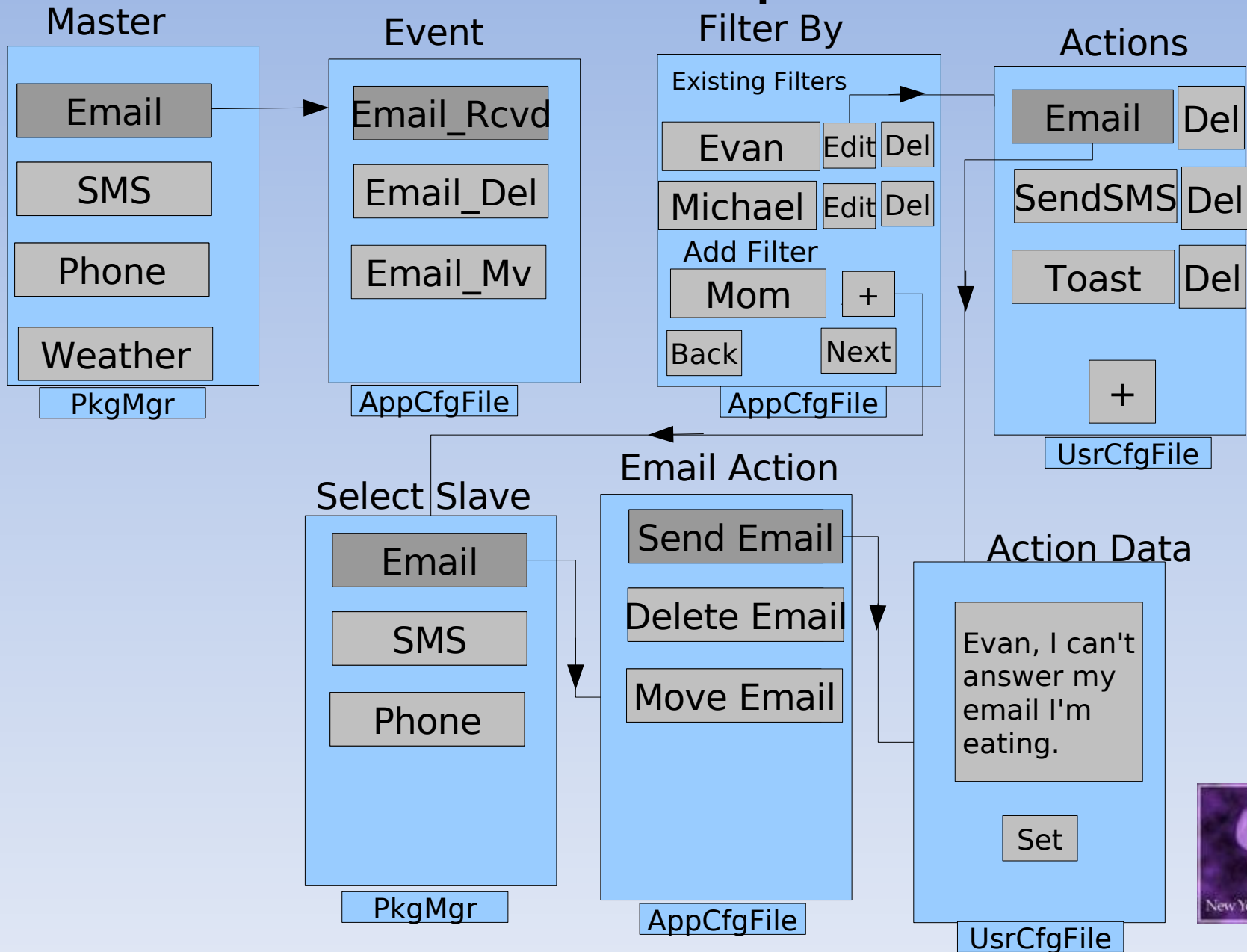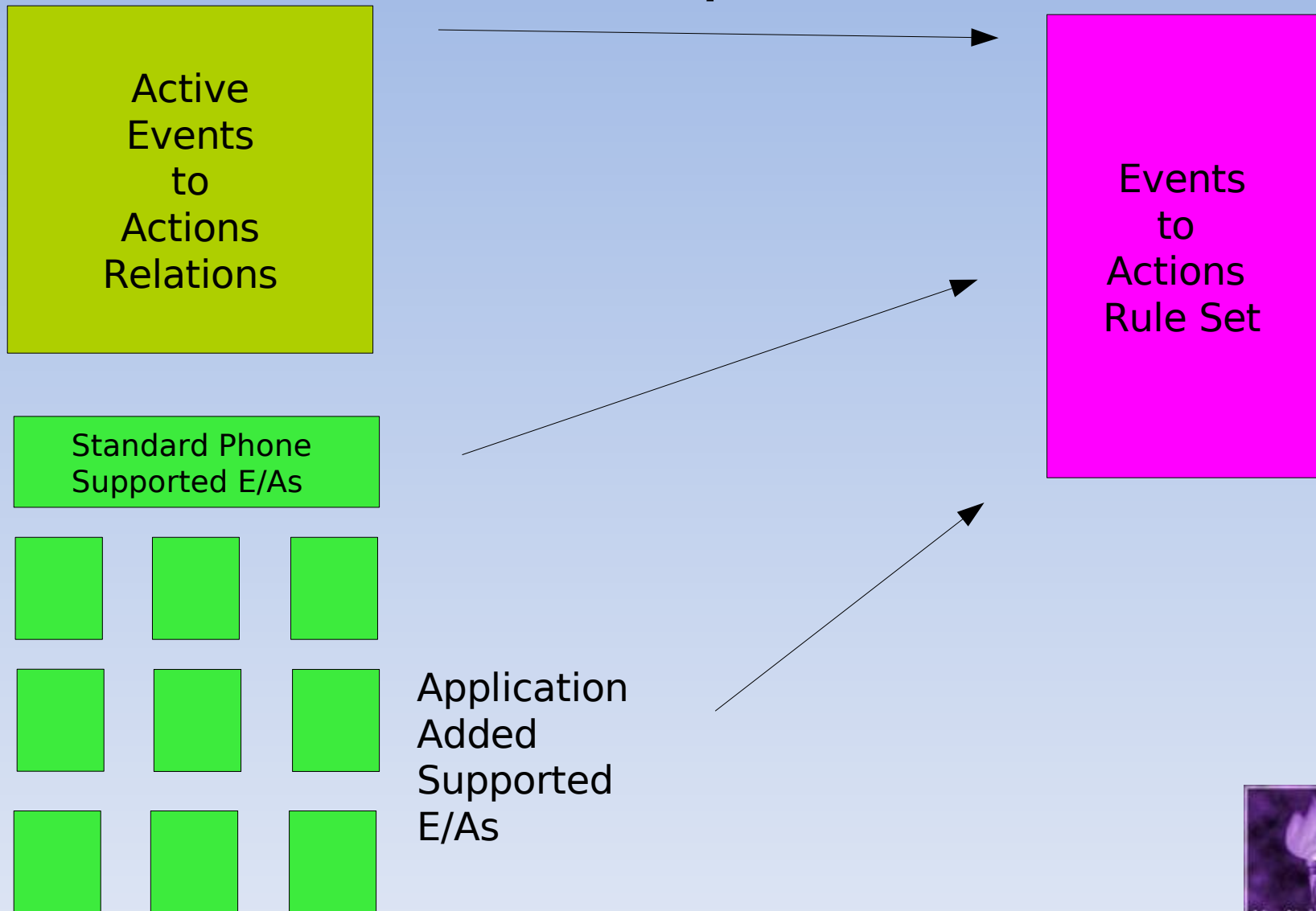E/A Engine

Events

Actions

E/A Engine

Application API

- Applications provide an XML document that lists the events and actions that this application supports.

- This XML document is added to a list of XML documents that the ruleset knows about

UI Example

Master
- Email
- SMS
- Phone
- Weather

PkgMgr

Event
- Email_Rcvd
- Email_Del
- Email_Mv

AppCfgFile

Filter By

Existing Filters
- Evan [Edit] [Del]
- Michael [Edit] [Del]

Add Filter
- Mom [+]
- [Back] [Next]

AppCfgFile

Actions
- Email [Del]
- SendSMS [Del]
- Toast [Del]
- [+]

UsrCfgFile

Select Slave
- Email
- SMS
- Phone

PkgMgr

Email Action
- Send Email
- Delete Email
- Move Email

AppCfgFile

Action Data

Evan, I can't answer my email I'm eating.

[Set]

UsrCfgFile

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Ruleset Comprised of…

Active
Events
to
Actions
Relations

Events
to
Actions
Rule Set

Standard Phone
Supported E/As

Application
Added
Supported
E/As

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Questions?

Suggestions?

Questions?

Suggestions?

Thank You