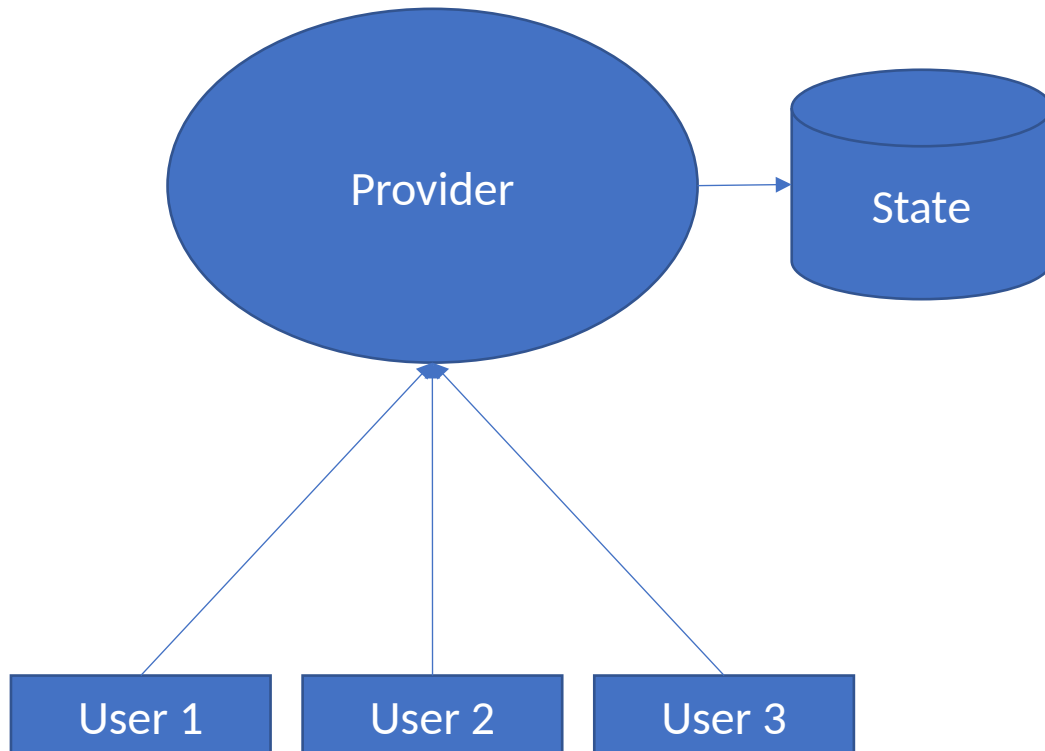


Architecture Options for MIMI

Jonathan Rosenberg

IETF 115

Single Provider View



State per Group

Shared state:

- Group membership
- Group name
- Message history
- Pins/bookmarks
- Shared documents
- Group roles

Per-participant state:

- Read markers per user

Transient data:

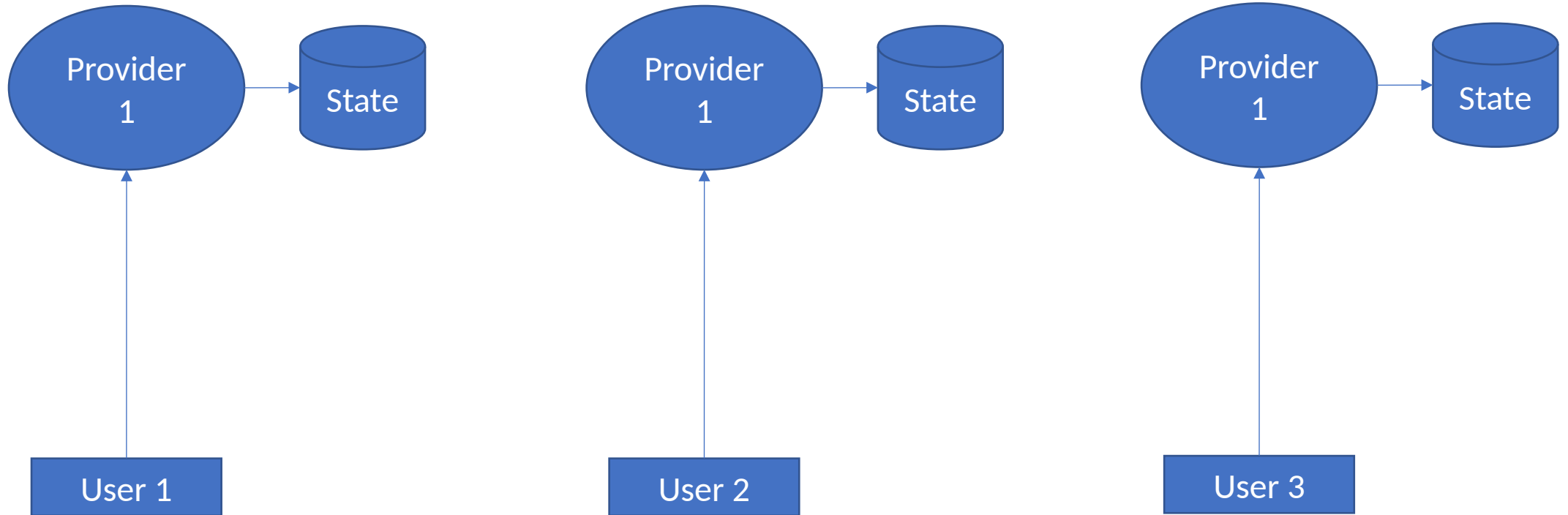
- Typing indicators

State per User

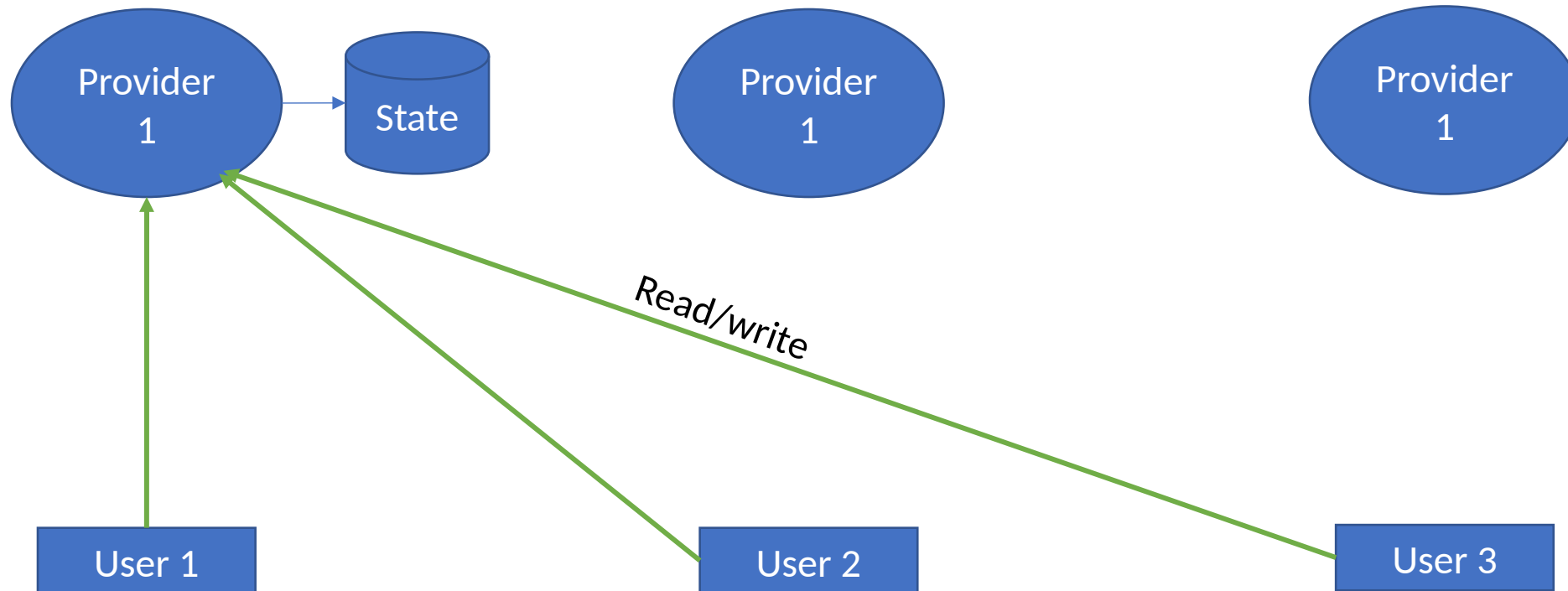
Groups a user is in

In a single provider system, this may not be denormalized data (i.e. its own table)

Multi Provider View

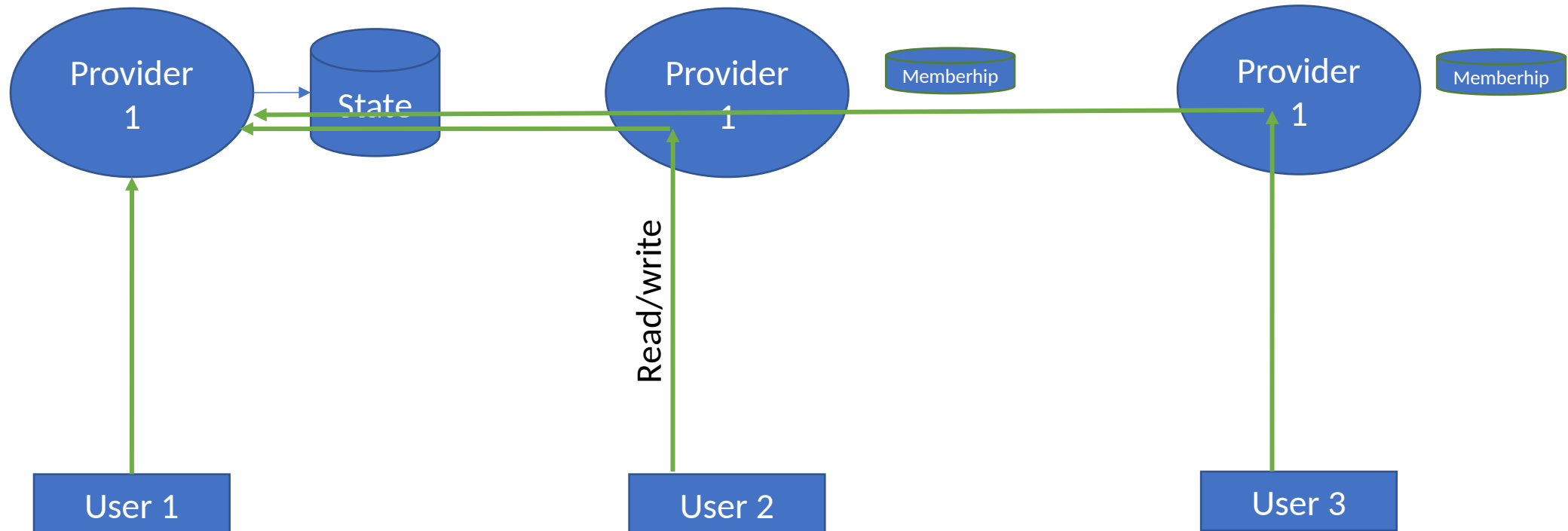


Multi Provider View: Option 1 – “Guest Model”

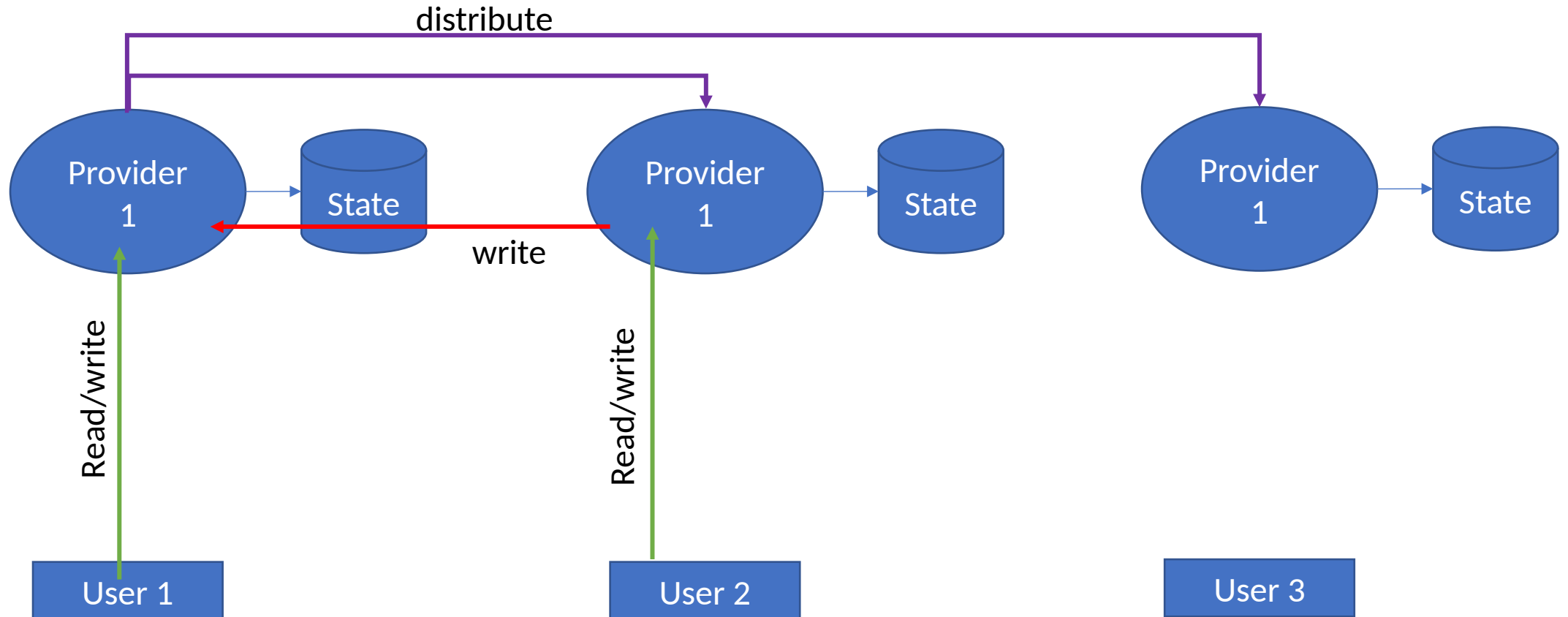


Doesn't really work – each user needs to know which providers to connect to

Multi Provider View: Option 2 – “Proxied Guest Model”

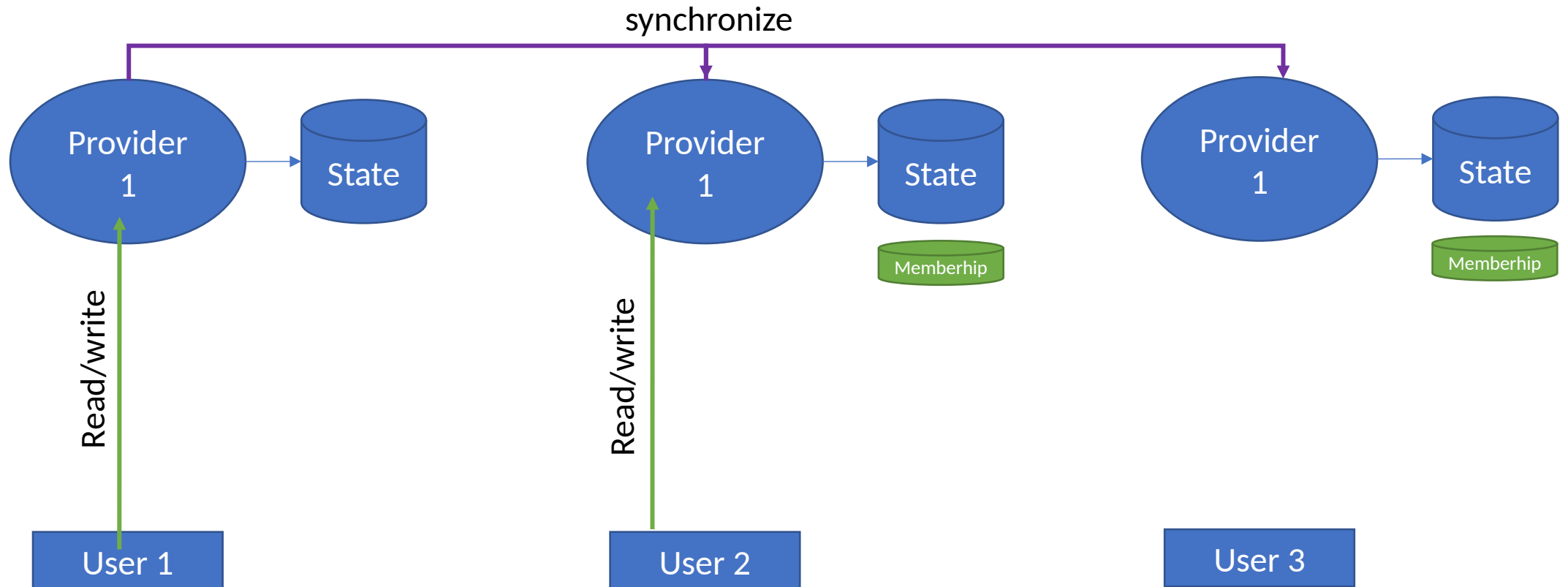


Multi Provider View: Option 3 – “Single SoT”



This is the model assumed by CAST.
Variants include sync push (like smtp), pub/sub (cast), polling
Works with MLS as designed today

Multi Provider View: Option 4 – “Multiple SoT”



This is the model assumed by Matrix
Requires enhancements to MLS (DMLS)

	rosenberg-msg-format	mahy-mimi-content	Matrix
Text	X	X	X
Media (image, video, audio)	X	X	X
Edits	X	X	X
Deletions	X	X	X
Reaction	X	X	X
Thread/Reply	X	X	X
Group name	X		
Richtext	X	X	X
Mention		X	
Unreact/Unlike		X	
Expiring Message		X	
Knock		X	
Read Receipt		X	X
Delivery Receipt			
Chat topic			
File xfer			X
Stickers			X
Custom Emoji			X
Polls			X
Location share			X
Spoiler Text			X
isTyping			X
Presence			X

This is what is currently in the three message format docs. Easy to add any feature to any format. The real question is:

What features should we specify?

What features should we make MTI?