Elements

2

Base data

V2

1

View 2

View

Delta stream

V

A

Get/Put stream

View 1

WAL stream

Base data

Raw stream

A

Multi View computation (separate)

View 4

View 2

View 3

V3

V4

V2

2 3 4

A

Base data

Multi View computation (union)

View 2, 3, 4

A

Base data

V2,3,4

2 ∨ 3 ∨ 4

View joining

R1

B

A

1

3

2

Flow model

View 2

View 1

2

Base data

V2

A

1

View

Base data

V

yG+zP

yG+zP

xF

xF

yG+zP

A

xF

Total: xF+yG+zP

Total: 2xF+2yG+2zP

1

V3

Base data

View 3

View 2

V2

V4

View 4

A

Total: 2xF+2yG+2zP

View 2

View 1

Base data

V2

A

0.5(yG+zP)

2[ST=0.5]

3(yG+zP)

xF

2 ∨ 3 ∨ 4

xF

yG+zP

yG+zP

1

xF

xF

Equivalence classes

1. c2 < 5(A)) = c2 < 5(A)

c2 < 5

V2

c2 < 5

A

(c1,c2)

1. c1,COUNT(c2) (A)) + c1,SUM(c2) (A))   
   = c1,COUNT(c2) ∨ c1,SUM(c2) (A))

V1

V1

c1,SUM(c2)

c1,COUNT(c2)

(c1,c2)

A

1. c1, c2 (c2 < 5(A)) = c1,c2 c2 < 5(A)))

(c1,c2)

V2

c1,c2

c1,c2 c2 < 5

V2

c2 < 5

A

R1

B

R3

1. (A B) C = A (B C)

R2

C

A