

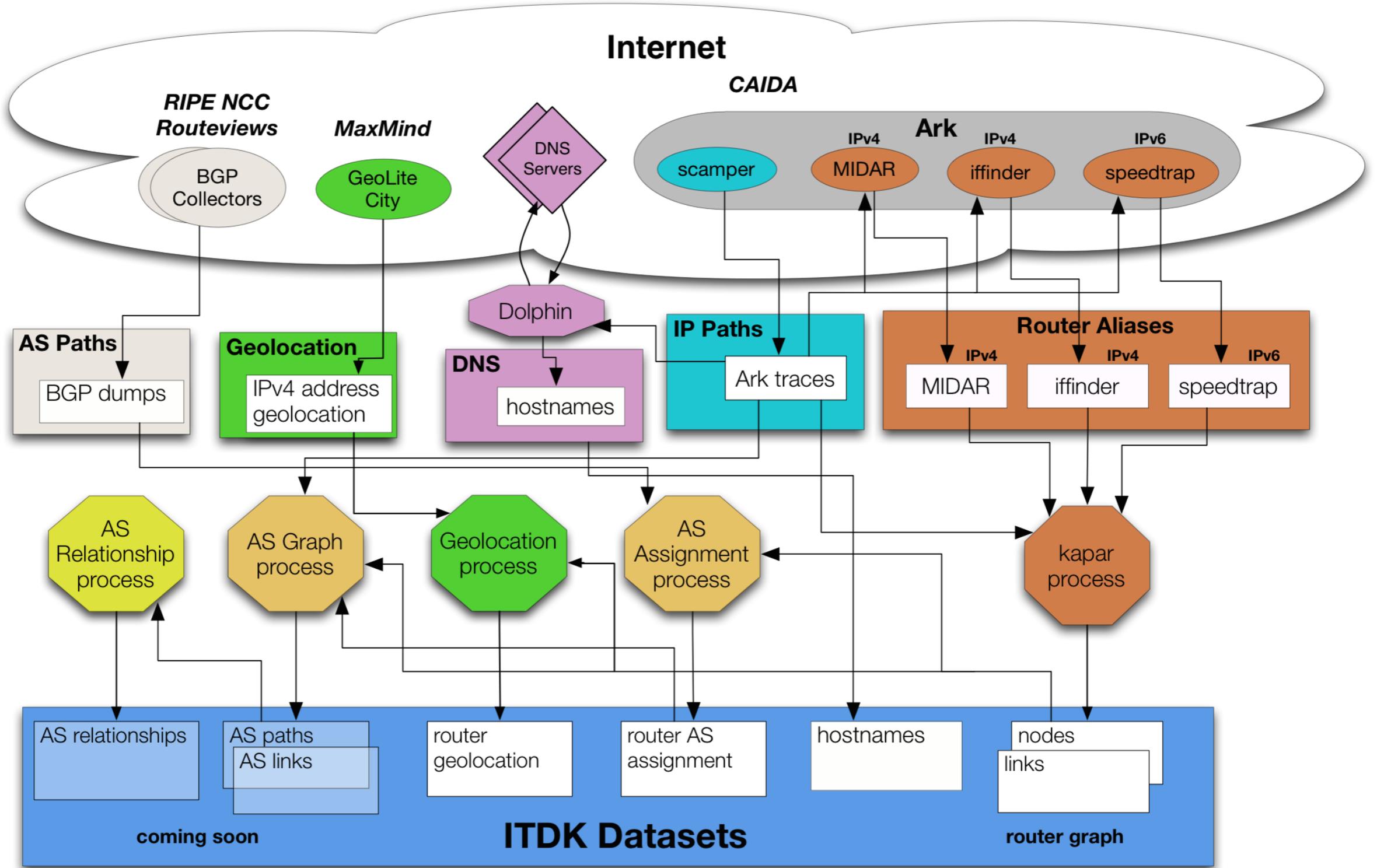
DIBBS EI: Platform for Applied Network Data Analysis (PANDA)

CAIDA

PANDA

- Existing Data Building Blocks to Integrate
 - Archipelago Active Internet Measurement Platform and Supporting Components
 - ASRank: Comparison of routing and economic relationships among ISPs
 - BGPStream: efficient framework for routing (BGP) data analysis
 - Periscope: Extending measurement coverage by leveraging operational infrastructure
 - MANIC: Mapping and Analysis of Interdomain Congestion
 - Spoofer: Assessment of IP address validation best practices (Waikato)

ITDK: Internet Topology Data Kit Process



3 Tasks

- Task 1: PANDA: Platform for Applied Network Data Analysis
 - Software development to scale performance and functionality for community use
 - Create software modules to link components to each other and external software
 - Increase community accessibility of unified platform and underlying components
- Task 2: Support for and collaboration with multiple disciplines
- Task 3: Extensibility and adaptation to new opportunities

Overview



existing ——— planned - - - - -



Measurement Software and Hardware Infrastructures to Support Data Collection

Resulting Databases and Datasets

CAIDA Platforms

- Archipelago [Ark]**
Collection of active monitors
- Vela [Vela]**
on-demand measurement
- Henya [Hen]**
topology query system
- ASRank [AR]**
ISPs' Autonomous System (AS) ranking and relationships
- BGPStream [BS]**
Collector/Database for processing BGP data
- Spoofers [Spfr]**
[Ark, User] run code to check for "spoofed" addresses
- Periscope [Per]**
Interface to public looking glass interfaces

Hosting Organizations

- Letter Of Collaboration (LOC)
- Waikato University [WaiU]**
- RIPE NCC [RIPE]**
- University of Twente [UTwe]**
- University of Pisa [UPisa]**
- DigitalElements [DE]**
- MAX MIND [Max]**
- Hurricane Electric [HE]**
- Federal Communication Commission [FCC]**
- Regional Internet Registry [RIR]**
- Route Views [RV]**
- Amazon [Amzn]**
- Cloudscene [CS]**
- PeeringDB [PDB]**
- Packet Clearing House [PCH]**
- Users [User]**
Volunteers running measurement code
- Operators [Op]**
ISP Operators running measurement code

