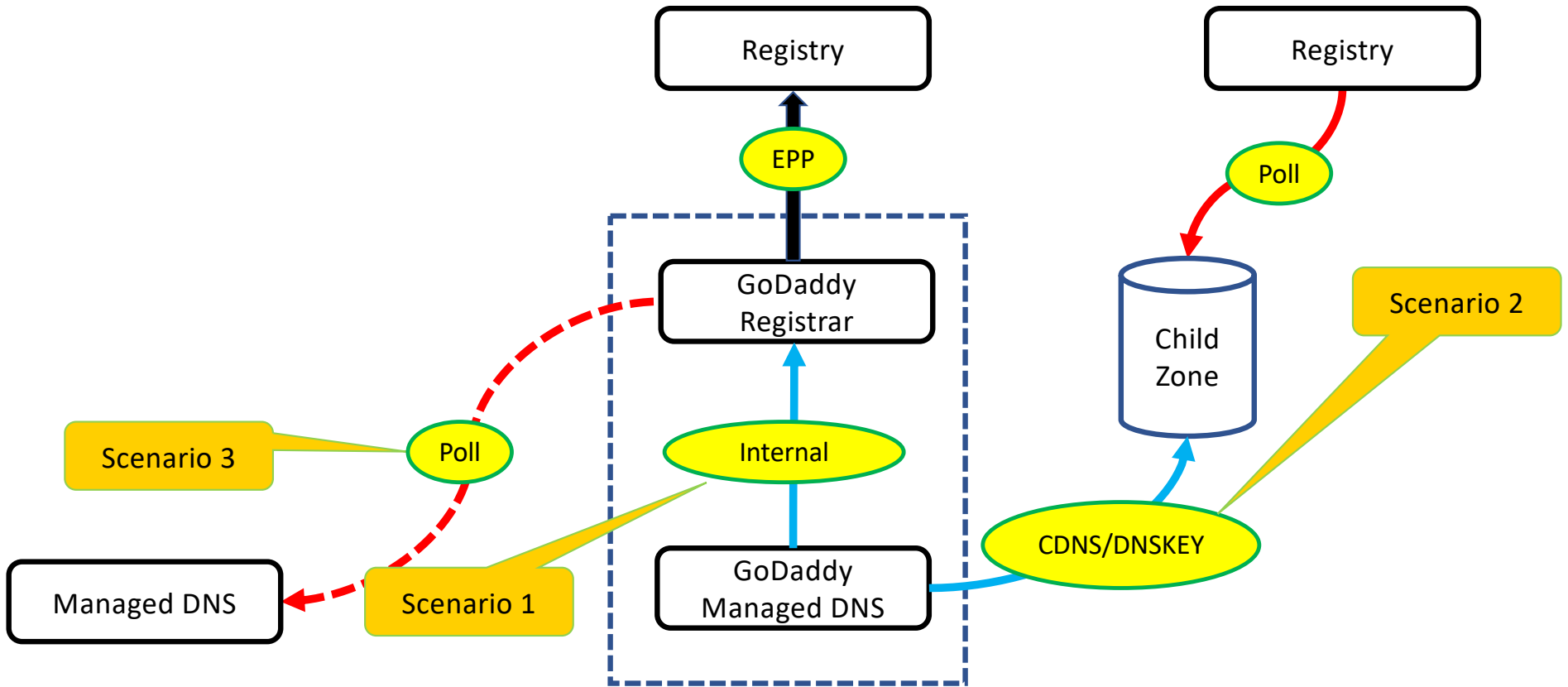


# GoDaddy DNSSEC DS

Current and Proposed DS Update Methods for KSK Rollovers

Brian Dickson, GoDaddy

# GoDaddy DNS – Three Scenarios



# GoDaddy DNSSEC DS – KSK Rollover

- Managed DNS (Scenarios 1 & 2):
  - KSK rolls automated
  - EPP Update(s) Sent to Registry
  - Regardless of parent (TLD), CDS and CDNSKEY are always published
  - Managed DNS performs initial DS when DNSSEC is enabled
- Third Party DNS (Scenario 3)(Proposed Enhancement):
  - Require initial DS registration, to authorize and initiate polling
  - Poll CDS and/or CDNSKEY periodically
  - EPP Update(s) Sent to Registry
  - **In development, at closed beta stage (contact us to participate)**

# DS Update Scenarios

Scenario	Registrar	DNS Provider	Update DS	Status
1	GD	GD	EPP, GD also publishes CDS/CDNSKEY record.	Fully Operational
2	Not GD	GD	GD publishes CDS/CDNSKEY record. Registry polls zone.	Fully Operational
3	GD	Not GD	DNS provider publishes CDS/CDNSKEY record. GD polls zone and submits DS and/or DNSKEY records	Under Development and Testing

# GoDaddy CDS Poller Update

- Third Party DNS (Scenario 3)(Proposed Enhancement):
  - **In development, at closed beta stage (contact us to participate)**
- Development is ongoing
  - Focus on scalability, performance
  - Scalable design allows new features
    - E.g. Bootstrap of DS, Multi-signer DNSSEC
  - Polling rate meets/exceeds full requirements:
    - All zones signed, poll for CDS
    - 1000 queries per second (currently capped rate)
  - Expect to expand beta by the end of summer 2022.
  - Sending CDS as DS via EPP tested

# GoDaddy CDS Poller Update

- Development is ongoing
  - Multi-stage poller "funnel":
    - Zone existence
    - Zone signed
    - DNS Operator not GoDaddy, but Registrar is GoDaddy
    - Has CDS
    - Signatures are valid
    - CDS is new or has changed
    - CDS differs from DS
    - Submit via EPP
  - Current milestones reached:
    - Existence;
    - CDS (skip intermediate checks for now)