Why XEvent?

SQLTrace and SQLProfiler are deprecated

Faster and scalable

Designed not to cause server problems

More events than SQLTrace ever had

Targets and actions make it powerful

SSMS includes the basic UI tooling

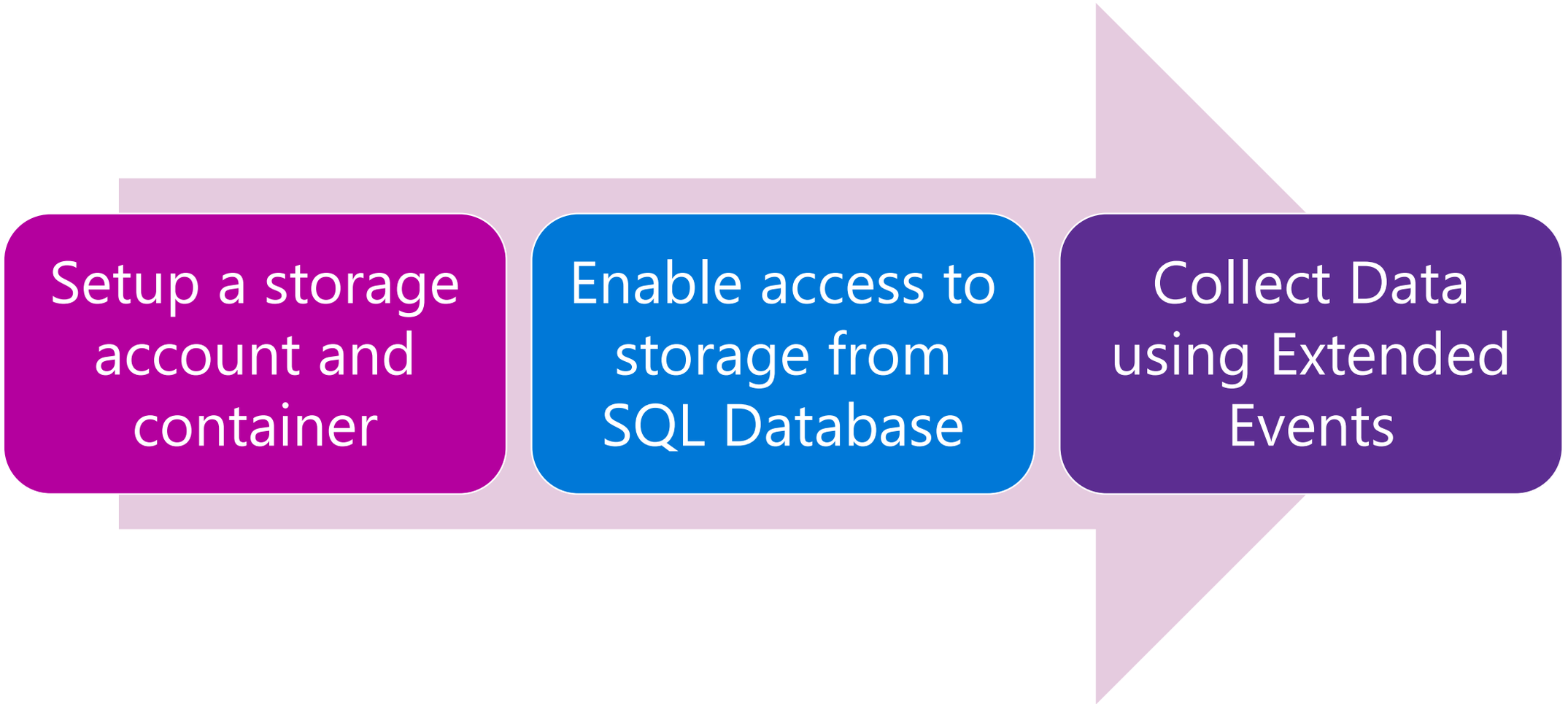
XEvents Objects Explained

Event	• Predefined instrumentation points in the code
Actions	• Event independent data to add to the collection • Ex. sql_text, create_dump_all_threads
Predicates	• Independent fields for filtering • Ex. database_id, session_id
Targets	• Ring Buffer,Event Counter, Event File
Maps	• maps “codes” to meaningful names • Ex. wait_type

Xevents Usage Scenarios

- Slow Query Performance
- High Lock Waits
- Blocking
- Deadlocks
- High CPU

How to enable Extended Events



Storage Container Authorizations

- You need to create a Shared Acces Signature on the Storage account.
- It provides delegated access to resources in your storage account.
- Grant clients access to resources in your storage account, without sharing your account keys.
- For Xevents you need to Read, Write & List permissions
- Use Azure Storage Explorer or Azure Portal to create SAS Token

Collect Data Using Extended Events

- Create a master key specifying a strong password.

```
CREATE MASTER KEY ENCRYPTION BY PASSWORD = 'xxxxxx!';
```

- Define the blob storage where the XEL will be save. Use the SAS key that was provided by the definition of the blob storage.

```
CREATE DATABASE SCOPED CREDENTIAL
[https://xxxx.blob.core.windows.net/xe-container]
WITH IDENTITY='SHARED ACCESS SIGNATURE',
SECRET = 'sv=2014-02-14&sr=c&sig=Hz2n9vs%3D&st=2016-01-
25T23%3A00%3A00Z&se=2016-02-02T23%3A00%3A00Z&sp=rw'
```

- Define the Extended Event

- Start the event and wait to reproduce the issue.
- Once the issue has been reproduced, stop the event.
- You should see XEL files in the storage container in Azure Storage Explorer.
- You can then download to your laptop/local machine