Great question 👍 — before creating an **AWS DataSync Agent**, you need to gather a clear set of inputs from the environment and stakeholders. Here’s a checklist of **requirements and questions** you should ask to ensure all necessary information is collected:

**🔹 General Requirements**

1. **Region**
   * In which AWS region will the DataSync agent resources be managed?
2. **Deployment Location**
   * Will the agent be deployed **on-premises** (VMware ESXi, Hyper-V, KVM) or **in AWS** (EC2 instance)?
3. **Networking**
   * Which network/VLAN/subnet will the agent connect to?
   * Is there a **public internet connection** or will it use **VPC endpoints / Direct Connect / VPN**?
   * What are the **firewall rules / ports** required to reach AWS DataSync service endpoints?
4. **Authentication**
   * Do you have the **IAM Role/Policy** defined for DataSync?
   * Will it use **KMS keys** for encryption?

**🔹 On-Premises Specific**

If deploying **on-prem agent**:

* Which **hypervisor** is in use (VMware ESXi, Hyper-V, KVM)?
* Do you have enough **resources** for the VM? (min: 4 vCPUs, 32 GiB RAM, 80 GiB disk).
* What **network interface** will it use? Static IP or DHCP?
* Will the agent need to connect to **SMB** or **NFS servers**? Collect:
  + **Server FQDN/IP**
  + **Share paths**
  + **Credentials (SMB user/password or NFS access rules)**

**🔹 In-AWS Agent Specific**

If deploying **EC2-based agent**:

* Which **VPC** and **subnet** should it launch into?
* Should it have a **public IP** or use a **NAT Gateway/VPC endpoint**?
* What **security groups** should be attached? (Allow HTTPS outbound to DataSync service).
* Instance size (recommended: m5.xlarge or larger).
* Will it use an **IAM Instance Profile**?

**🔹 Storage Endpoint Details**

* Source type: **NFS, SMB, Amazon S3, FSx, EFS, or HDFS**?
* Destination type: **S3, FSx, EFS, HDFS**?
* For SMB:
  + Domain-joined or standalone?
  + Active Directory details if required.
* For NFS:
  + NFS version supported?
  + Allowed client IPs?

**🔹 Security & Compliance**

* Who will **own/manage** the credentials for SMB/NFS?
* Should **TLS encryption in transit** be enforced?
* Any compliance requirements for **audit logging** (CloudWatch logs, S3 logs, etc.)?

**✅ Sample Questions to Ask in a Meeting**

1. Which AWS **region** should we deploy the DataSync agent in?
2. Should the agent run **on-premises** (VMware/Hyper-V/KVM) or as an **EC2 instance in AWS**?
3. What **VPC, subnet, and security groups** should we use if deployed in AWS?
4. If on-premises, what **hypervisor platform** do we have available and what **IP/network settings** should be configured?
5. What is the **source storage type** (NFS, SMB, FSx, EFS, etc.) and details (server name, share path, credentials)?
6. What is the **destination storage type** (S3, FSx, EFS, etc.)?
7. What **IAM roles/policies** or **KMS keys** should the agent use?
8. Do we need **Direct Connect/VPN** or will traffic flow via the **public internet**?
9. Are there **firewall/proxy restrictions** we must account for? (Ports 443 to DataSync service).
10. Who is responsible for managing **credentials** and how should they be stored securely (e.g., Secrets Manager)?
11. What are the **performance/throughput expectations** (e.g., bandwidth available for migration windows)?
12. Are there **logging, monitoring, or audit requirements** for compliance (CloudWatch, S3 logs)?

👉 Once you collect this info, you can proceed to **deploy the agent** either by importing an OVA/ISO on-prem or launching via **EC2 AMI in AWS**, and then activate it in the AWS DataSync console using the **activation key**.

Do you want me to also create a **pre-migration questionnaire form (Excel/Word template)** you can use in meetings to capture all these details neatly?

https://aws.amazon.com/blogs/storage/migrate-to-amazon-fsx-for-windows-file-server-using-aws-datasync/