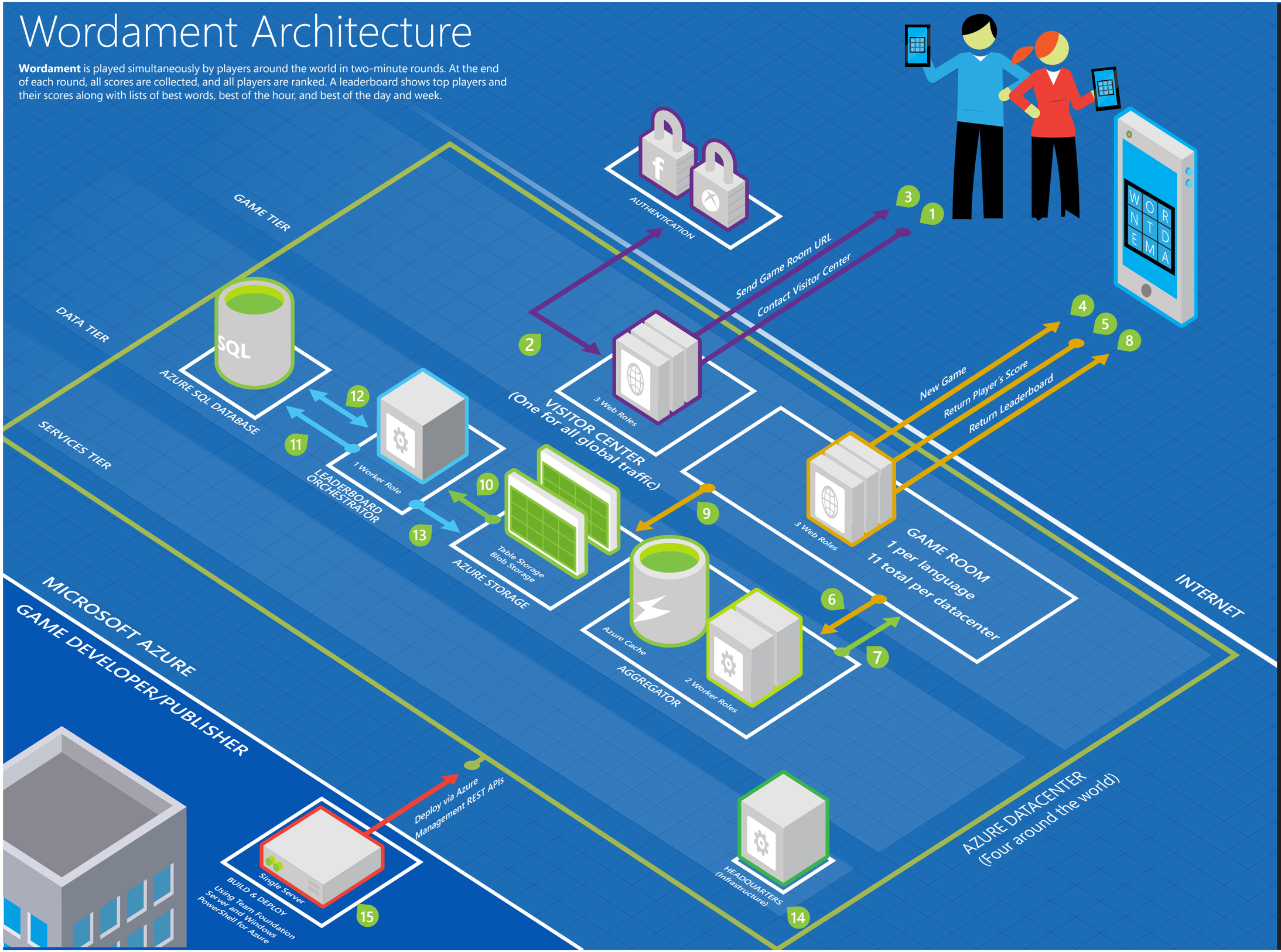
# Wordament Architecture

**Wordament** is played simultaneously by players around the world in two-minute rounds. At the end of each round, all scores are collected, and all players are ranked. A leaderboard shows top players and their scores along with lists of best words, best of the hour, and best of the day and week.




Microsoft

1. The client app pings the visitor center (VC) to test for Internet connectivity. If enabled, the client app logs in to Facebook or Xbox. It then sends the user identity token to the VC.
2. The VC confirms the identity with Facebook or Xbox and authorizes the player.
3. The VC sends a URL to the client. The URL goes to a specific game room for a language (for example, all French speakers).
4. The client connects to the game room, which returns a new game to the client, and the player begins playing a round.
5. After the game is over (in 2 minutes), the client app sends the player's score to the game room.
6. Each web role instance in the game room creates a file with all player scores, and sends the file to the Aggregator.
7. The Aggregator collects all scores from all roles and sends the complete set back to the game room.
8. Each game room role instance sends the results (the leaderboard) to the client apps.
9. The game room writes the results to blob storage.
10. The Leaderboard Orchestrator (LBO) reads the data from blob storage.
11. The LBO creates in-memory tables and inserts the data into Azure SQL Database using table-valued parameters and stored procedures.
12. The LBO runs stored procedures against the data and creates new persistent leaderboard files.
13. The LBO writes the persistent leaderboard files to blob storage.
14. The Headquarters service monitors and runs tests against the components.
15. An on-premises server builds and deploys the whole system, every day. Every four hours, the LBO is recycled (restarted).


Created by the Azure poster team
Email: AzurePoster@microsoft.com