Reduced complexity from O(2n) to O(1)

Behaviour has changed

ID now always increases

Could wrap if called std::numeric_limits<uint64_t>::max() times

18446744073709551615 (18x10^18)

That's quite a lot of tracks/clips/plugins

Contract has stayed the same - returns a unique ID

Checked with an assertion

- Reduced complexity from O(2n) to O(1)
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- Contract has stayed the same returns a unique ID
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Techniques for Optimisation

4. Caching appropriate data