Endomorphisms of Banach algebras and weighted composition operators on uniform algebras

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The objects of study in this report are the endomorphisms (also weighted endomorphisms) of commutative Banach algebras and weighted composition operators on function algebras as a wide generalization of weighted endomorphisms. Compactness (weak compactness), nuclearity, closedness of range, spectrum of these type operators on uniform algebras are investigated, and their eigen-subspaces are described up to biholomorphisms. Also, applications to the holomorphic perturbations of these operators on function algebras are given.