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Let R be a one-dimensional reduced Noetherian local ring of infinite Cohen-Macaulay type, and let P_1, \dots, P_s be the minimal prime ideals of R . From work of Roger Wiegand and others, it is known that for every positive integer r there is an indecomposable maximal Cohen-Macaulay R -module M of constant rank r , i.e. $M_{P_i} \cong R_{P_i}^{(r)}$ for each i . In this talk we explore the following question: For which non-trivial s -tuples (r_1, \dots, r_s) is there an indecomposable maximal Cohen-Macaulay R -module M such that $M_{P_i} \cong R_{P_i}^{(r_i)}$ for each i ? Our main result is that if R/P_1 has infinite Cohen-Macaulay type, then a non-trivial s -tuple (r_1, \dots, r_s) can be realized as the rank of an indecomposable maximal Cohen-Macaulay module whenever $r_1 \geq r_i$ for each i . (Received August 27, 2009)